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ABSTRACT

Provided in this document is a bibliography of selected materials addressing the interface between forestry and social sciences. Materials include articles appearing in United States and foreign professional journals, bibliographies, conference proceedings, and other types of publications. A table of contents contains the list of subjects with major topics in social science applied to: (1) forestry at large; (2) forest management; (3) production of forest goods and services; and (4) forest industries. Each entry includes citation number, author(s), title, source, year, and number of pages. In addition, if the publication is not in English, the language used is indicated. Brief annotations are provided for most entries. An author index is included. (DH)

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# SOCIAL SCIENCES in FORESTRY

## A CURRENT SELECTED BIBLIOGRAPHY AND INDEX

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# SOCIAL SCIENCES IN FORESTRY
## A Current Selected Bibliography and Index

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Patricia Rodkewich is Assistant Professor, Agricultural and Applied Economics Bibliographer, St. Paul Campus Libraries, University of Minnesota.

## Preface

Social Sciences in Forestry has been available to interested readers since 1963. We are pleased to inform you that the tradition will continue into the foreseeable future, with leadership for its publication being provided by the College of Forestry and the Forestry Library of the University of Minnesota. The bibliography will continue as a service to anyone with an interest in current literature which reports the application of the social sciences to the management and use of forests.

Four issues of the index will be published each year, in March, June, September, and December. The subject-matter classification scheme has been simplified and will serve as a table of contents to each issue. There will be an author index with each issue and this index will cumulate annually.

A new feature will be the subject keyword index which will appear in the December issue this year and will index the four 1985 issues. Subject indexes will be included with each issue beginning in March, 1986 and will cumulate annually.

An attempt will be made to index relevant literature back to and including 1982 if not already indexed in SSF. Coverage for 1982 and 1983 will be very selective.

Initials of the foreign cooperators follow the abstracts which they have contributed.

Diacritical marks are omitted because our microcomputer program will not accomodate them.

Theses will no longer be listed in a separate section in this bibliography but will be indexed with other publications on similar subjects. We will index only completed theses, not research in progress.

Most of the publications indexed are in the collections of the University of Minnesota Forestry Library. Photocopies or loans of this material are available through the Interlibrary Loan Department, St. Paul Campus Libraries, University of Minnesota, 1984 Buford Avenue, St. Paul, MN 55108.

We are intent on making this bibliography as useful as possible. If you have suggestions regarding its organization or subject scope, please contact us at the College of Forestry, University of Minnesota, 1530 N. Cleveland Ave., St. Paul, MN 55108.

Paul Ellefson
Jean Albrecht

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# SOCIAL SCIENCES APPLIED TO FORESTRY AT LARGE

## GENERAL PUBLICATIONS

1 Duerr, W.A., 1984. Forestry economics as problem solving. Blacksburg, VA, var. pag.

Intended for use primarily by forestry undergraduates, the book gives an overview of national and world forestry followed by sections on production, consumption, marketing, and valuation of forest resources. Social institutions including labor organizations and governmental planning are discussed.

2 Granskog, J.E. and Haney, H.L., Jr., eds., 1982. How to cope with hard times: Proceedings Southern Forest Economics Workshop, Charleston, 1982. Raleigh, North Carolina State Univ., Dept. of Forestry? 142 pp.

Includes sections on "forestry economics research," and "forecasting, taxes, and finance."

3 Japanese Forest Economic Society, 1982. The current state of Japanese forestry (II)- its problems and future. Contributions to IUFRO, Division 4. Tokyo. Japanese Forest Economic Society. 131 pp.

4 Japanese Forest Economic Society, 1984. The current state of Japanese forestry (III): Its problems and future. Contributions to IUFRO, Division 4. Tokyo, Japanese Forest Economic Society. 125 pp.

5 Kemp, M.C. and Long, N.V., 1984. On the economics of forests. In: Kemp, M.C. and Long, N.V., eds. Essays in the economics of exhaustible resources. New York, North-Holland. pp.163-187.

The authors "describe a productive process involving the point input of labour, the repeated input of land, and the point output of forest products, and then imbed the process in a model of the economy as a whole." (p.163)

6 Saskatchewan Forest Congress, Prince Albert, Saskatchewan, 1982. Proceedings: The Saskatchewan potential. Prince Albert, Saskatchewan Forestry Association. 164pp.

Collection of papers presented by representatives of labor, industry, and special interest sectors of the forest community.

FOREST RESOURCES: REGIONAL, NATIONAL, INTERNATIONAL

7 Absher, J.D. and Anderson, S.W., 1984. Illinois forest resources: Public responses to major issues. Illinois Agr. Expt. Sta., Forestry Research Report 83-3. 18pp.

Reports on a survey in the form of a questionnaire, the purpose of which was "to gather information from various segments of the public on Illinois forestlands." (p. 2).

8 Bonnor, G.M., 1984. Forest inventories in Canada: A look at the future. In: Lund, H.G., ed., Preparing for the 21st century, U.S. For. Serv., pp. 212-217.

"Hand in hand with a need for more intensive forest management, goes the need for better forest resource data." (p.212).

9 Boteler, F.E., 1983. Effects of West Virginia's changing timber resource on non-timber resources. In: Dempsey, G.P. and K.S. Price, eds. Governor's Conference on West Virginia's Forest Industry. pp. 60-77.

"This paper reviews the relationship between West Virginia's timber resource and recreation, water quality and wildlife." (p.60).

10 Clawson, M., 1983. Foothill resources: Economic and social considerations. In: Hannaway, D.B., ed. Foothills for food and forests. pp. 41-50.

11 Club of Rome Conference, Helsinki, Finland, July 9-12, 1984. Papers from Plenary Session and Seminar on Global Forests. Various pagings.

12 Ellefson, P.V., 1984. Minnesota forestry: Resource status, economic importance, and conditions influencing future directions. Statement to Legislative Commission on Minnesota Resources, Commission Issues Seminar, Itasca State Park, May, 1984. Mimeo, 20pp.

13 Hahn, J.T., 1982. Timber resource of Michigan's Southern Lower Peninsula, 1980. U.S. For. Serv., Resource Bulletin NC-66. 119 pp.

Presents highlights and statistics on area, volume, growth, mortality, removals, utilization, and biomass.

14 Hamilton, L.S., 1984. A perspective on forestry in Asia and the Pacific. Wallaceana W36; East-West Environment and Policy Institute Reprint no. 67. 8 pp.

15 Hannaway, D.B., ed., 1983. Foothills for food and forests. Oregon State University, College of Agricultural Sciences, Symposium Series no. 2. Beaverton, Oregon, Timber Press, 383 pp.

Proceedings of the International Hill Land Symposium held at Oregon State University, April,1983. "The focus of this symposium is on the vast foothill resources of the world that have potential for cuncurrent production of forage and timber resources." (p.13).

16 Harris, E.H.M., 1985. Forestry in Austria: The Society visit September, 1983. Quarterly Journal of Forestry 79:13-24.
"An overall picture of forestry in Austria" is given, including "Details of forest laws, rights and taxation together with yield and produce markets...." (p.13).

17 Maydell, H.J. Von and Ceychan, S., 1985. The up-to-date forest resources of the USSR. Holz-Zentralblatt 111:201-202.
(In German). The result of the Soviet forest inventory and forest statistics to January 1,1983 are published in the Soviet forest magazine Lesnoe Khoziaistvo. Since the last forest inventory from January 1, 1978, the stocked forest area has increased by 19,3 millions of hectares; the growing stock by 1,8 billions of cubic metres. (WK)

18 Mwagiru, W., 1982. The forest resource in Kenya in relation to other natural resources. In: Hallsworth, E.G., ed. Socio-economic effects and constraints in tropical forest management. N.Y., Wiley. pp. 131-141.

19 Peterson, R.M., 1983. The awakening: Prologue and perspectives for the eastern hardwood resources. In: Dempsey, G.P. and Price, K.S., eds. Governor's Conference on West Virginia's Forest Industry. pp.15-19.

20 Petrov, A.P., 1984. Economic, ecological and social aspects of the utilization of the forest resources of Siberia. Paper for the Club of Rome Helsinki Conference, July, 1984, 14pp.

21 Raile, G.K. and Smith, W.B., 1983. Michigan forest statistics, 1980. U.S. For. Serv., Resource Bulletin NC-67. 101 pp.
"The fourth inventory of the timber resource of Michigan shows a 7 percent decline in commercial forest area and a 27 percent gain in growing-stock volume between 1966 and 1980." (abstract).

22 Sampson, G.R., et al., 1983. Forestry in Alaska. In: Alaska's agriculture and forestry. University of Alaska, Coop. Ext. Serv. and U.S. Dept. of Agriculture. Alaska Rural Development Council Publ. no. 3, pp.177-199.

23 Schick, B.A., 1983. Trends in West Virginia's timber resources. In: Dempsey, G.P. and Price, K.S., eds. Governor's Conference on West Virginia's Forest Industry. pp.27-53.

24 Sedjo, R.A., 1983. The potential of U.S. forest lands in the world context. In: Sedjo, R.A., ed. Governmental interventions, social needs, and the management of U.S. forests. pp.53-77.
This chapter provides a quick survey of the global forest resource base and "concludes with speculation as to the future U.S. role as an industrial forest resource producer within the context of a dynamic global environment." (p.53).

25 Simula, M., 1984. Forestry and development--a global viewpoint. Paper for the Club of Rome Helsinki Conference, July, 1984. 22pp.

26 Spencer, J.S., Jr., 1983. Michigan's fourth forest inventory: Area. U.S. For. Serv., Resource Bulletin NC-68. 39pp.+ map.

27 Stadelman, W.R., 1984. Global forests. Paper presented at Plenary

Session and Seminar on Global Forests, Club of Rome Helsinki Conference, July 1984. 5pp.

28 Thomas, C.E., 1985. Oklahoma midcycle survey shows changes in forest resources. U.S. For. Serv., Resource Bulletin SO-100. 19pp.
The previous survey was conducted in 1976. To aid in forest resource planning an abbreviated midcycle survey was made in 1981. The midcycle technique involves remeasurement of about 10% of the forest plots. (p.1)

29 Tsay, T.-B., 1985. Forestry report: Japan. Canadian Forestry Service, Information Report DPC-X-17. 61pp.
"This report summarizes forest resource and related information on Japan." (p.iii)

30 Uusitalo, M., editor, 1984. Metsatilastollinen vuosikirja 1983: Yearbook of forest statistics. Folia Forestalia 590. 224pp.
Includes statistics on forest area, growing stock, seedling production, forest fires, labour force, transportation of roundwood, wood consumption, foreign trade, etc.

31 Vandor, P., 1984. Global forests. Paper for Club of Rome Helsinki Conference, July, 1984. 6pp.

32 Walters, J., 1982. Saskatchewan forestry potential. In: Saskatchewan Forest Congress, Prince Albert, 1982. Proceedings. pp.38-45.

HISTORY

33 Adas, M., 1983. Colonization, commercial agriculture, and the destruction of the deltaic rainforests of British Burma in the late nineteenth century. In: Tucker, R.P. and J.F. Richards, eds. Global deforestation and the nineteenth-century world economy. Durham, N C, Duke Univ. Press. pp. 95-110.

34 American Pulpwood Association Inc., 1984. Fifty years of service to the pulpwood industry: A history of the American Pulpwood Association Inc. 1934-1984. Washington, D.C., APA. 56 pp.

35 Araki, T. and Iizuka, M., 1984. Sustained-yield concept and its paulownia productivity. In: Steen, H.K., ed., History of Sustained-Yield Forestry: A Symposium, 1983, pp. 289-296.

36 Arvola, T.F. 1985. The maturing of California state forestry, 1943-47. Journal of Forest History 29(1):22-31.

37 Baldwin, C.A., 1982. Making the most of the best: Willamette Industries' seventy - five years. Portland, Oregon. Willamette Industries, Inc. 172 pp.
A history of the Willamette Valley Lumber Co.

38 Barlowe, R., 1983. Changing land use and policies: The Lake States. In: Flader, S.L., ed. The Great Lakes forest; an environmental and social history. Minneapolis, University of Minnesota Press. pp 156-176

39 Bjorklund, J., 1984. From the Gulf of Bothnia to the White Sea: Direct Swedish investments in the sawmill industry of Tsarist Russia. In: Steen, H.K., ed., History of Sustained-Yield Forestry: A Symposium, 1983, pp. 145-154.

40 Boese, D.L., 1984. Papermakers: The Blandin Paper Company and Grand Rapids, Minnesota. Grand Rapids, MN, Charles K. Blandin Foundation. 366 pp.

41 Bourdo, E.A., Jr., 1983. The forest the settlers saw. In: Flader, S.L., ed. The Great Lakes forest; an environmental and social history. Minneapolis, University of Minnesota Press. pp. 3-16.

42 Burgar, R.J., 1983. Forest land-use evolution in Ontario's Upper Great Lakes basin. In: Flader, S.L., ed. The Great Lakes forest; an environmental and social history. Minneapolis, University of Minnesota Press. pp. 177-193.

43 Campana, R.J. and Stipes, R.J., 1984. A history of the Dutch elm disease in North America. In: Steen, H.K., ed., History of Sustained-Yield Forestry: A Symposium, 1983, pp. 118-133.

44 Carroll, F.M. and Raiter, F.R., 1985. The people versus the government:

The 1918 Cloquet fire and the struggle for compensation. Journal of Forest History 29(1):4-21.

45 Clawson, M., 1982. History of forest use in the United States of America (1800 to 1980). In: Actes du Symposium International d'Histoire Forestiere, Nancy, 1979, 2:189-199.

46 Clawson, M., and Sedjo, R., 1984. History of Sustained Yield concept and its application to developing countries. In: Steen, H.K., ed. History of Sustained-Yield Forestry: A Symposium, 1983, pp.3-15.

47 Cornell, J.B., 1984. Three decades of Matsunagi: Changing patterns of forest land use in an Okayama (Japan) mountain village. In: Steen, H.K., ed. History of Sustained-Yield Forestry: A symposium, 1983. pp.237-250.

48 Cox, T.R., 1983. Trade, development, and environmental change: The utilization of North America's Pacific Coast forests to 1914 and its consequences. In: Tucker, R.P. and J.F. Richards, eds. Global deforestation and the nineteenth-century world economy. Durham, N.C., Duke Univ. Press. pp.14-29.

49 Crocker, M.D., 1984. Forest policy in post-revolutionary Mexico: 1917-1943. In: Steen, H.K., ed. History of Sustained-Yield Forestry: A Symposium, 1983, pp.360-369.

50 Dargavel, J., 1984. Radical analysis of forest history: A Tasmanian case. In: Steen, H.K., ed. History of Sustained-Yield Forestry: A Symposium, 1983. pp.297-305.

51 Davis, R.C., ed., 1983. Encyclopedia of American forest and conservation history. New York, Macmillan. 2 vols., 871 pp.
The goal of the Forest History Society in compiling this Encyclopedia was "to produce the standard, authorative guide and reference to the history of forestry, conservation, forest industries, and other forest-related subjects in the United States." (p.xxv).

52 Dean, W., 1983. Deforestation in Southeastern Brazil. In: Tucker, R.P. and J.F. Richards, eds., Global deforestation and the ninteenth-century world economy. Durham, N.C., Duke Univ. Press. pp 50-67.

53 Ermentrout, R.A., 1982. Forgotten men: The Civilian Conservation Corps. Smithtown, N.Y., Exposition Press. 102 pp.
An examination of the 9 year life of the CCC.

54 Eyre, F.H., 1982. Autobiography of a forester. Society of American Foresters. 98 pp.

55 Flader, S.L., ed., 1983. The Great Lakes forest; an environmental and social history. Minneapolis, University of Minnesota Press, in assoc. with Forest History Society. 336pp.

56 Fritzell, P.A., 1983. Changing conceptions of the Great Lakes forest: Jacques Cartier to Sigurd Olson. In: Flader, S.L., ed. The Great Lakes forest; an environmental and social history. Minneapolis, University of Minnesota Press. pp. 274-294.

57 Gaunitz, S., 1984. Resource exploitation on the North Swedish timber frontier in the 19th and the beginning of the 20th centuries. In: Steen, H.K., ed. History of Sustained-Yield Forestry: A Symposium, 1983, pp. 134-144.

58 Gillis, P. and Roach, T., 1984. Early European and North American forestry in Canada: The Ontario example, 1890-1941. In: Steen, H.K., ed., History of Sustained - Yield Forestry: A Symposium, 1983, pp. 211-219.

59 Hagenstein, W.D., 1983. We wooded the world. In: Bethel, J.S., ed., World trade in forest products, pp. 276-286.
Brief history of the lumber industry in the Pacific Northwest.

60 Harkin, D.A., 1983. The significance of the Menominee experience in the forest history of the Great Lakes Region. In: Flader, S.L., ed., The Great Lakes forest; an environmental and social history. Minneapolis, University of Minnesota Press. pp. 96-112.
Memominee County, Wis., the reservation of the Menominee Indians since 1854, is 93% forested. The forests of Menominee County carry three times the board-foot volume per acre of the average Wisconson woodland. (p.96).

61 Hays, S.P., 1983. Human choice in the Great Lakes wildlands. In: Flader, S.L., ed. The Great Lakes Forest; an environmental and social history. Minneapolis, University of Minnesota Press. pp.295-318.
"This chapter offers historical perspective on the most critical factor in future policy with regard to the Great Lakes forest--the human perceptions, values, and institutions that constitute the major setting in which choices are made." (p.295)

62 Hill-Manetas, L., 1984. The destruction of sustained-yield on Loughton Manor in the seventeenth century. In: Steen, H.K., ed. History of Sustained-Yield Forestry: A Symposium, 1983. pp.392-400.
Loughton Manor is near London.

63 Hughes, J.D., 1984. Sacred groves: The gods, forest protection, and sustained yield in the ancient world. In: Steen, H.K., ed. History of Sustained-Yield Forestry: A Symposium, 1983. pp.331-343.

64 Hurst, J.W., 1983. The institutional environment of the logging era in Wisconsin. In: Flader, S.L., ed. The Great Lakes forest; an environmental and social history. Minneapolis, University of Minnesota Press. pp.137-155.
This chapter concerns "public policy and the limits that the context of circumstances and prevailing attitudes put on effective use of law to affect uses of the forest." (p.137)

65 Johann, E., 1984. The change of conception of sustained yield within the forestry of Austria during the last 200 years. In: Steen, H.K., ed., History of Sustained-Yield Forestry: A Symposium, 1983, pp. 183-191.

66 Jones, S.R. and Wigston, D.L., 1984. The Warleigh Woods of Tamerton Foliot, Devon, UK, 1778-1914; a study in the decline of sustained yield wood and timber management. In: Steen, H.K., ed., History of Sustained-Yield Forestry: A Symposium, 1983, pp. 375-391.

67 Judd, R., 1984. Geopolitics and the lumbering frontier: The case of Aroostook County, Maine, 1842-1911. In: Steen, H.K., ed., History of Sustained-yield Forestry: A Symposium, 1983, pp. 111-117.

68 Kroth, W. and Plochmann R., 1985. Julius Speer as scientist and forest polititian. Holz-Zentralblatt 111:237-238.
(In German). On the occasion of a commemoration for Prof. Dr.Dr.h.c. Julius Speer, who died on June 8,1984, his exceptional life and career as a scientist and forest politician was appreciated by a speech given by Prof. Dr. W. Kroth. (WK)

69 Le Master, D.C., 1984. Decade of change: The remaking of Forest Service statutory authority during the 1970s. Westport, Conn., Greenwood Press. (Contributions in Political Science no. 113) 290pp.
Covers in detail the Forest and Rangeland Renewable Resources Planning Act of 1974 and the National Forest Management Act, 1976. Covers briefly: Multiple Use-Sustained Yield Act; Wilderness Act; National Environmental Policy Act; Clearcutting controversy; and Timber Supply Act.

70 Lee, R.G., 1984. Sustained-yield and social order. In: Steen, H.K., ed., History of Sustained-Yield Forestry: A Symposium, 1983, pp. 90-100.

71 Lillard, R.G., 1982. The place of forests in American History: An overview of changing perspectives. In: Actes du Symposium International d'Histoire Forestiere, Nancy, 1979, 1:307-313.

72 Lin, F., 1984. Some aspects of the history of sustained-yield forestry in Inner Mongolia, China. In: Steen, H.K., ed. History of Sustained-Yield Forestry: A Symposium, 1983, pp.229-236.

73 Meiggs, R., 1982. Trees and timber in the ancient Mediterranean world. Oxford, Clarendon Press. 553pp. + map and plates.

74 Melville, E.G.K., 1984. Environmental degradation caused by overgrazing of sheep in sixteenth century Mexico. In: Steen, H.K., ed., History of Sustained-Yield Forestry: A Symposium, 1983, pp.370-374.

75 Mitsuda, H., 1984. Impacts of rapid economic growth on the structure of mountain communities: Depopulation and disorganization in charcoal-producing mountain villages of Kyoto Prefecture in Japan. In: Steen, H.K., ed. History of Sustained-Yield Forestry: A Symposium, 1983. pp.251-269.
"This paper is concerned with the causes of rapid outmigration in several Japanese mountain communities...and what the impacts of this process have been on the social structure...." (p.251)

76 Moeller, B.B., 1984. A quarter century of change in the Brazilian Amazon. In: Steen, H.K., ed. History of Sustained-Yield Forestry: A Symposium 1983, pp. 353-359.

77 Murphey, R., 1983. Deforestation in modern China. In: Tucker, R.P. and J.F. Richards, eds. Global deforestation and the nineteenth century world economy. Durham, N.C., Duke Univ. Press. pp. 111-128.

78 Netzorg, L.B., 1982. History of federal legislation on sustained yield

forestry. In: LeMaster, D.C., et al., eds. Sustained yield. pp. 19-22.

79 Niesslein, E. and Hauff, D., 1984. Forest-historical investigations on the forest decline. Forstwissenschaftliches Centralblatt 103:153-163. (In German; English summary). Side by side with increasingly applied empirical working methods in the field of the social sciences, forest-historical investigations will remain an important part of forest policy science. In connection with the forest decline this applies to research into its causes as well as into its effects. (WK)

80 Niesslein, E., 1984. Can historical research be of help in forest policy decisions? In: Steen, H.K., ed. History of Sustained-Yield Forestry: A Symposium, 1983. pp.16-20.

81 Raumolin, J., 1984. The formation of the sustained yield forestry system in Finland. In: Steen, H.K., ed., History of Sustained-Yield Forestry: A Symposium, 1983, pp. 155-169.

82 Roach, T.R., 1984. Farm woodlots and pulpwood exports from eastern Canada, 1900-1930. In: Steen, H.K., ed., History of Sustained-Yield Forestry: A symposium, 1983, pp. 202-210.

83 Roche, M.M., 1984. Some historical influences on the establishment of protected natural areas in New Zealand, 1880-1980. In: Dingwall, P.R., comp. People and parks. pp.7-15.

84 Roth, D.M., 1983. Philippine forests and forestry: 1565-1920. In: Tucker, R.P. and Richards, J.F., eds. Global deforestation and the nineteenth-century world economy. Durham, N.C., Duke Univ. Press. pp.30-49. "The history of deforestation as it unfolded until approximately 1920 and the attempts to control it are the subjects of this paper." (p.30)

85 Rowley, W. D., 1984. Privilege vs. right: Livestock grazing in the U.S. government forests. In: Steen, H.K., ed. History of Sustained-Yield Forestry: A Symposium, 1983. pp.61-67.

86 Rubner, H., 1984. Sustained-yield forestry in Europe and its crisis during the era of Nazi dictatorship. In: Steen, H.K., ed. History of Sustained-Yield Forestry: A Symposium, 1983. pp.170-175.

87 Sandberg, L., 1983. The response of forest industries to a changing environment. In: Flader, S.L., ed. The Great Lakes forest; an environmental and social history. Minneapolis, University of Minnesota Press. pp.194-204.

88 Schrepfer, S.R., 1983. The fight to save the Redwoods: A history of environmental reform 1917-1978. Madison, University of Wisconsin Press, 338pp.

89 Schuler, A., 1984. Sustained-yield forestry and forest functions, as seen by Swiss foresters in the nineteenth century. In: Steen, H.K., ed. History of Sustained-Yield Forestry: A Symposium, 1983, pp.192-201.

90 Schultz, R.P., 1983. The original slash pine forest--an historical view. In: Stone, E.L., ed. The Managed Slash Pine Ecosystem. pp.24-47.

91 Shimotori, S., 1984. Trends and problems in national forest management in Hokkaido since World War II. In: Steen, H.K., ed. History of Sustained-Yield Forestry: A Symposium, 1983, pp.281-288.

92 Steen, H.K., 1982. Property and the American conservation movement. In: Actes du Symposium International d'Histoire Forestier, Nancy, 1979, 2:233-240.

93 Steen, H.K., ed., 1984. History of Sustained-Yield Forestry: A Symposium, Portland, Oregon, 1983. Coordinated by the Forest History Society for IUFRO Forest History Group (S6.07). Santa Cruz, Calif., Forest History Society. 470 pp.

94 Stott, M.J., 1982. Wilderness as a forest product. In: Actes du Symposium International d'Histoire Forestiere, Nancy, 1979, 1:305-306.

95 Symposium International d' Histoire Forestiere, Nancy, 1979. Actes. Nancy, Ecole Nationale du Genie Rural. 2 vols. (317,340 pp.), 1982.

96 Thirgood, J.V., 1984. The struggle for sustention on the island of Cyprus. In: Steen, H.K., ed. History of Sustained-Yield Forestry: a Symposium, 1983. pp.313-330.
Traces primarily the last 100 years from a period of almost total destruction to the present era of "progressive forest policies." (p.328)

97 Totman, C., 1984. From exploitation to plantation forestry in early modern Japan: An overview. In: Steen, H.K., ed. History of Sustained-yield Forestry: A Symposium, 1983, pp. 270-280.

98 Towle, E.L., 1982. A brief history of forest policy and the Forest Service in the United States. In: Actes du Symposium International d'Histoire Forestiere, Nancy, 1979, 2:284-304.

99 Tucker, R.P. and Richards, J.F., eds., 1983. Global deforestation and the nineteenth - century world economy. Durham, N.C., Duke University Press. 210 pp.

100 Tucker, R.P., 1983. The British colonial system and the forests of the western Himalayas, 1815-1914. In: Tucker, R.P. and Richards, J.F., eds. Global deforestation and the nineteenth-century world economy. Durham, N.C., Duke Univ. Press. pp.146-166.

101 Tucker, R.P., 1984. The historical context of social forestry in the Kumaon Himalayas. Journal of Developing Areas 18:341-355.

102 Twining, C.E., 1983. The lumbering frontier. In: Flader, S.L., ed. The Great Lakes forest; an environmental and social history. Minneapolis, University of Minnesota Press. pp. 121-136.

103 Veblen, T.T., 1984. Degradation of native forest resources in southern Chile. In: Steen, H.K., ed. History of Sustained-Yield Forestry: A Symposium, 1983. pp. 344-352
"The history of use of native forest resources in southern Chile illustrates how neglect of conservation measures, in particular the lack of application of techniques for sustained-yield forest management, has

led to resource destruction." (p.344)

104 Wiebecke, C. and Peters, W., 1984. Aspects of sustained yield forestry: Forest sustention as the principle of forestry--idea and reality. In: Steen, H.K., ed. History of Sustained-Yield Forestry: A Symposium, 1983. pp.176-182.

105 Wigston, D.L., 1984. Historical aspects of forestry problems in Papua New Guinea. In: Steen, H.K., ed. History of Sustained-Yield Forestry: A Symposium, 1983. pp.306-312.

106 Williams, G.W., 1984. The Civilian Conservaton Corps' (CCC) contribution to the forests in the Pacific Northwest Region. In: Steen, H.K., ed. History of Sustained-Yield Forestry: A Symposium, 1983. pp.48-57.

107 Williams, M., 1982. The impact of lumbering on the Great Lakes Forest (1860-1900). In: Actes du Symposium International d'Histoire Forestiere, Nancy, 1979. 1:294-304.

108 Williams, M., 1983. Thinking about the forest: A comparative view from three continents. In: Flader, S.L., ed. The Great Lakes forest; an environmental and social history. Minneapolis, University of Minnesota Press. pp.253-273.
Discusses environmental change in America, Britain, and Australia.

109 Young, W., 1984. Development of sustained yield forest management in British Columbia. In: Steen, H.K., ed. History of Sustained-Yield Forestry: A Symposium, 1983. pp.220-225.

## LEGISLATION

110 Buttoud, G., 1984. La legislation francaise sur la foret privee. In: Schmithusen, F., ed. Forestry legislation. pp. 14-22.

111 Coggins, G.C. and Wilkinson, C.F., 1983. 1983 supplement to Federal Public Land and Resources Law. Mineola, N.Y., Foundation Press. 215 pp.
Includes section on "the timber resource", "the range resource", "the recreation resource", and "the preservation resource."

112 Cubbage, F.W. and Siegel, W.C., 1984. Forest practice law: Statutory provisions and court decisions. In: Lortie, M., ed. Forest resources management--the influence of policy and law. pp.191-195.
"Forest practice regulation is one means of implementing forest policy on private and, in some cases, public land. The significance of current forest practice regulation and prospects for future development are discussed." (p.191).

113 DeMaria, S.L., 1983. The legislative and regulatory environment for forestry enterprises in California. University of California, Berkeley, Dept. of For. and Res. Manage., S.J. Hall Lectureship in Industrial Forestry, May 13, 1983. 12 pp.
Reviews the relationship of the California forest products industry with the legislature and state regulatory agencies.

114 Ellefson, P.V., 1984. Forest practice laws as a regulatory force: Organizational and administrative experiences in the United States. In: Schmithusen, F., ed. Forestry legislation. pp.31-47.

115 Johnson, C.M., 1984. Legislative mechanisms to balance public and private interests in forest management. In: Lortie, M., ed., Forest resources management - the influence of policy and law. pp. 18-24.
"This paper emphasizes some current forest managment issues and examines how they are addressed through legislation and policy in British Columbia...." (p.18).

116 Mulugeta, A., 1984. The impact of the "Forest and Wildlife Conservation and Development Proclamation no. 192 of 1980" on forest development in Ethiopia. In: Schmithusen, F., ed. Forestry legislation. pp.71-86.
The proclamation placed all forest and wildlife resources of the country under governmental control.

117 Natividad, W.R., 1984. Land-use control instruments: Their role in forest conservation. In: Schmithusen, F., ed., Forestry legislation. pp. 102-110.
The "land-use control instruments" to which the author refers are legislative or administrative documents which regulate land resources. The author is specifically referring to the situation in the Philippines.

118 Niesslein, E., 1984. Forest dieback and legislation. In: Schmithusen,

F., ed., Forestry legislation. pp. 118-124.
"if today's forest policy wants to fight forest dieback... then it has to deal with legislation beyond traditional forest laws." (p.119).

119 Owusu, J.G.K., 1984. The congruence between statutory forest legislation and indigenous forest policies and laws. In: Schmithusen, F., ed. Forestry legislation. pp. 125-139.
"Divergence arises mainly from a failure of national forest policy makers to consider the social and economic needs of the forest dwelling communities." (p.125).

120 Puddister, M.J. and Lapping, M.B., 1983. Regulating private forests: An evaluation of the Ontario Tree Conservation Law. In: Royer, J.P. and C.D. Risbrudt, eds. Nonindustrial Private Forests... Symp. Proc. pp. 345-351.

121 Schmithusen, F., 1982. Recent trends of forest legislation in developing countries. Resource Management and Optimization 2:27-40.

122 Schmithusen, F., ed. 1984. Fortgesetzgebung; Forestry legislation; Legislation Forestiere: Report of the IUFRO Working Party S4.06-04. Zurich, Fachbereich Forstokonomie und Forstpolitik. Forstwissenschaftliche Beitrage no. 2. 176pp. (Articles in English, French, or German)

123 Siegel, W.C. and Cubbage, F.W., 1984. Environmental protection law and forest management regulation on private lands in the United States. In: Schmithusen, F., ed. Forestry legislation. pp.140-156.
The authors briefly review the "historical development of forest and environmental law, " followed by "an overview of important environmental and land-use legislation affecting forest management practices in the United States today." (p.140)

124 U.S. Forest Service, 1983. The principal laws relating to Forest Service activities. U.S. Department of Agriculture, Agriculture Handbook no. 453, revised Sept., 1983. 591pp.

125 U.S. Forest Service, 1985. Supplemental information for the principal laws related to Forest Service activities. U.S. Department of Agriculture, Agriculture Handbook no. 453, revised Sept., 1983. [suppl.] 41pp. + app.

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126 Adams, P.W., 1984. Oregon's Forest Practice Rules. Oregon State Univ. Ext. Serv., Ext. Circ. 1194. 11pp.

127 Adeyoju, S.K., 1984. International factors and the prospects for integrating African forest resources policies. In: Lortie, M.[editor]. Forest resources management - the influence of policy and law, pp. 103-110.

128 Alston, R.M., 1982. Philosophical conflict in the evolution of American national forest economic policy. In: Actes du Symposium International d'Histoire Forestiere, Nancy, 1979, 2:200-212.

129 Alston, R.M., 1983. The individual vs. the public interest: Political ideology and national forest policy. Boulder, Colorado, Westview Press. 250 pp.

130 Appelroth, S.E., 1984. Forest policy and laws in Finland. In: Lortie, M., ed., Forest resources management - the influence of policy and law, pp. 29-31.

131 Bergoffen, G.S., 1982. Provison for "departures" from nondeclining timber yields on the national forests. In: LeMaster, D.C. et al., eds. Sustained yield, pp. 67-75.

132 Bethel, J.S. et al., 1982. The role of U.S. multinational corporations in commercial forestry operations in the tropics. A report submitted to the Department of State. University of Washington, College of Forest Resources. 306 pp.

"The objective of this study is to examine the role of U.S. multinational corporations... engaged in commercial forestry operations in the tropics and to assess U.S. government policy options with respect to such corporations and their operations." (p.1).

133 Beuter, J.H., 1982. The economic assumptions and implications of the regulated forest. In: LeMaster, D.C. et al., eds. Sustained yield, pp. 37-43.

"Although the regulated forest is questionable as an end in itself or a means to an end, it is an ideal that guides forest management decisions." (p.43).

134 Brazilian Institute for Forestry Development, 1982. Guidelines for Brazilian forestry policy, period 1979-1985. In: Oldeman, R.A.A., ed. Tropical hardwood utilization, pp. 125-142.

135 Brooks, J.L., 1984. The interaction of policy, law and planning: The Minnesota experience. In: Lortie, M., ed. Forest resources management - the influence of policy and law, pp. 201-205.

Describes the "Legislative Commission on Minnesota Resources and its unique role in both program and policy development." The author also describes "several provisions of the 1982 Forest Management Act...." (p.201).

136 Burch, W.R., Jr. and DeLuca, D.R., 1984. Measuring the social impact of natural resource policies. Albuquerque, University of New Mexico Press. 216 pp.

137 Campbell, R. and Pearse, P.H., 1984. Policy instruments for reconciling competing demands on public forest land. In: F. Schmithhusen, ed., Forestry legislation. pp. 23-30.
"examines the problem of resolving conflicts among land uses on public forest land." (p.23).

138 Carriker, R.R., 1984. Research needs for federal land policy formulation and implementation. In: Retention of Farmland: Proc. of a Regional Workshop, 1983. Southern Rural Development Center and Farm Foundation, SRDC 73;SNREC 19, pp. 86-102.

139 Carron, L.T., 1983. National forest policy - myth, manifesto, mandate or mandala? Australian Forestry 46:261-269.

140 Castle, E.N., 1984. Explaining the changes in resource policy. Renewable Resources Journal 2(4):8-11.
Discusses three forces for change: International relations, national events, and state and local developments. This article was taken from an address before the Renewable Natural Resources Foundation Winter Forum on Implications of Change in Renewable Resources Policy, Washington, D.C., Dec. 20, 1983.

141 Cohen, S.I., 1985. The afforestation of Israel. Journal of Forestry 83:94-99.

142 Falk, E., 1984. Forest political goals and means: A Swedish example. In: Lortie, M., ed., Forest resources management - the influence of policy and law, pp. 42-46.
The forest sector in Sweden accounts for 6% of the total work force and 5% of the GNP. Therfore, "society has a great interest to influence the forestry activities." (p.42).

143 Hagner, S., 1983. Swedish experience with sustained-yield forestry. In: Sadler, B., ed. Canada's forests: Transition to management. pp. 71-82.
"The purpose of this paper is to discuss the opportunities and difficulties that have been experienced in Sweden in connection with the transition from straight exploitation of the forest to renewable-resource forestry." (p.71).

144 Holmes, G.D., 1984. National forestry policies and the wise management of forest resources. In: Lortie, M., ed., Forest resources management - the influence of policy and law, pp. 4-8.
"A commentary on the process of developing National Forestry Policies and its adequacy in ensuring that our forest resources are managed wisely." (p.4).

145 Hummel, F. and Van Maaren, A., 1984. Policy formation. In: Hummel, F.C., ed. Forest policy. pp.283-304.
A discussion of the process by which forest policy is formed.

146 Hummel, F., 1984. Institutions and administration. In: Hummel, F.C., ed., Forest policy. pp. 213-257.
The "instruments of implementation " of forest policy are discussed under the following headings: Forest ownership, legislation, taxation and incentives, education and training, research, organization, and personnel.

147 Hummel, F.C., ed., 1984. Forest policy: A contribution to resource development. The Hague, Martinus Nijhoff/W. Junk. 310pp.

148 Kaiser, H.F., 1983. Inventory and landowner information for developing forest policy. In: Bell, J.F. and Atterbury, T., eds. Renewable resource inventories for monitoring changes and trends. pp.49-51.

149 Kalkkinen, E., 1984. International organizations and conferences. In: Hummel, F.C., ed. Forest Policy. pp.259-281.
Discussion of international influences on national forest policies. Includes an appendix of addresses of international organizations.

150 Kawamura, M., 1984. Purpose and policy of the National Forest Management in Japan since World War II. In: Japanese Forest Economic Society. The current state of Japanese forestry (III). pp.66-75.

151 Le Master, D.C., Baumgartner, D.M., and Adams, D., eds., 1982. Sustained yield: Proceedings of a symposium held April 27 and 28, 1982, Spokane, Washington. Washington State University, Coop. Ext. 144pp.
There are several definitions of sustained yield, each used "with differing degrees of acceptance." The papers included in this volume "provide a thorough discussion of sustained yield, including the nondeclining yield policy for the national forests and the provisions for departure." (foreword)

152 Lee, R.G., 1982. The classical sustained yield concept: Content and philosophical origins. In: Le Master, D.C. et al., eds. Sustained yield. pp. 1-10.
"This paper explains the European origin of sustained yield and its adoption and persistence in the United States." (p. 1)

153 Peck, T., 1984. The world perspective. In: Hummel, F.C., ed. Forest policy. pp. 21-66.

154 Runge, C.F., 1984. The innovation of rules and the structure of incentives in open access resources. University of Minnesota, Dept. of Agr. and Applied Economics, Staff Paper P84-31, 13pp.
"Open access" to resources implies the absence of restrictions affecting extraction or use. Self-policing is sometimes necessary, e.g. international fisheries.

155 Sadler, B., 1983. From concensus to choice in forest policy. In: Sadler, B., ed. Canada's forests: Transition to management. pp.1-8.

156 Sadler. B., ed., 1983. Canada's forests: Transition to management. (Proc.) National Resources Conference, Banff, 1981. Calgary, Univ. of Calgary Press. 112pp.

157 Shands, W. E. and Dawson, D.H., 1984. Policies for the Lake States

forests: Final report of the Lake States Forest Policy Workshop, Rhinelander, Wis. Washington, D.C., Conservation Foundation. 33 pp.

158 Simmons, R., 1983. Strengthening the Canadian forest resource base. In: Sadler, B., ed. Canada's forests: Transition to management. pp.9-12.

159 Teeguarden, D.E., 1982. Where do we go from here in the application of sustained yield? In: LeMaster, D.C. et al., eds. Sustained yield, pp. 141-144

160 Tikkanen, I., 1983. Effectiveness of forest policy programs: A policy analysis perspective. In: Royer, J.P. and C.D. Risbrudt, eds. Nonindustrial Private Forests... Symp. Proc. pp. 352-368.
"The empirical policy analysis applied here is employed to examine the effects of public forest policy in Finland. The policy is designed to stimulate forestry investments of NIPF owners by means of cost-sharing." (p.353).

161 Tiwari, K.M., 1984. Influence of policy and law on the forest resources management in India. In: Lortie, M., ed., Forest resources management - the influence of policy and law, pp. 93-102.

162 Tsutsui, M., 1982. A conceptual change needed in forest policy: From a circular configuration with one focal point to an ellipsoidal configuration with two focal points. in: Japanese Forest Economic Society. The current state of Japanese forestry (II). pp.115-122.
Advocates a forest policy based on economic efficiency and conservation. These two functions should be of equal value.

163 Van Maaren, A. 1984. Forest and forestry in national life. In: Hummel, F.C., ed. Forest policy. pp. 1-19.

164 Waggener, T.R., 1982. What are acceptable criteria for comparing sustained yield alternatives? In: LeMaster, D.C. et al., eds. Sustained yield. pp. 131-139.

165 Whaley, R.S., 1984. Forest resources management - the influence of policy and law. In: Lortie, M., ed., Forest resources management - the influence of policy and law, pp. 32-34.
One of the questions addressed was, when is government intervention in the management or regulation of forest appropriate? (in the context of a free enterprise society).

166 Wheatcraft, A.M., Ellefson, P.V. and Bradley, D.P., 1984. Forest residues in northeastern Minnesota: Policy options to encourage management and use. University of Minnesota, College of Forestry, Dept. of For. Res., Staff Paper Series no 44. 59 pp.

167 White, W.A., 1982. Economic and social implications to the Saskatchewan economy of developing our forest potential. In: Saskatchewan Forest Congress, Prince Albert, 1982. Proceedings. pp.52-55.

168 Wikstrom, J.H., 1983. Our changing concepts of sustained-yield and forest balance. In: Kuusela, K. and Nyyssonen, A., eds. Forest inventory for improved management, Helsingin Yliopiston Metsanarvioimistieteen laitos Tiedonantoja. 17:185-194.

The author advocates devising"an approach to forest balance and sustained yield...that provides for economic efficiency within the context of ecological efficiency....We must develop sufficient understanding of the relevant data of other disciplines, especially ecology and social sciences, in order to effectively manage the forest ecosystem." (p.192-193)

PLANNING

169 Alig, R.J. and Knight, H.A., 1983. Forest acreage model for the U.S. Southeast. In: Bell, J.F. and T. Atterbury, eds. Renewable resource inventories for monitoring changes and trends. pp. 242-246.

170 Alward, G.S. and Palmer, C.J., 1983. IMPLAN: An input-output analysis system for Forest Service planning. In: Seppala, R., C. Row, and A. Morgan, eds., Forest sector models. pp. 131-140.
"IMPLAN, a computer-based system for developing non-survey input-output models, is discussed." (p.131).

171 American Pulpwood Association Inc., 1984. 1985-86 Strategic Plan. APA Special Project 84-A-12. Washington, D.C. 29 pp.
"The strategic planning process, as it continues, evolves, and matures, will provide a directed approach and more efficient allocation of APA resources."

172 Anderson, J.P., and Craig, W.J., 1984. Growing energy crops on Minnesota's wetlands: The land use perspective. University of Minnesota, Center for Urban and Regional Affairs, Publ. no. CURA 84-3. 95 pp.

173 Anderson, M., and Wilkinson, C., 1984. Meeting the criteria: The law, decision making... and the fate of the forest plan. Forest Planning 5(9):14-18.
"The Forest Service has a difficult task to perform in putting together a national forest plan." "... planners must not only meet all legal standards but also pay close attention to the public's concerns... " (p.14).

174 Bailey, R.G., 1984. Land delineation survey: Background and status. In: Lund, H.G., ed. Preparing for the 21st century, U.S. For. Serv., pp. 28-31.
"For land management planning purposes the national forests have been delineated into ecological units (ecosystems) that reflect differences in response to management and resource production capablity." (p.28).

175 Baum, E. and Irland, L., 1984. North American forest in 2080: Planning styles for sustainability. In: Lortie, M. ed., Forest resources managemnt - the influence of policy and law, pp. 290-297.
Five planning styles are discussed: Process-oriented; issue-driven; output-driven; alternative futures; and condition/bequest. "Of these, only the condition/bequest style, because it concentrates on the resource condition is appropriate to plan for a forest of 2080." (p.290).

176 Bell, J.F. and Atterbury, T., editors, 1983. Renewable resource inventories for monitoring changes and trends: Proc. of an international conference, Corvallis, Oregon, 1983. Sponsored by Society of American Foresters et al. Corvallis, Oregon State University, College of Forestry, 737 pp.

177 Buckman, R.E. and Van Sickle, C., 1983. Resource change information is the key to Forest Service planning. In: Bell, J.F. and T. Atterbury, eds. Renewable resource inventories for monitoring changes and trends, pp. 24-27.

178 Clawson, M., 1983. Forest land use in the United States: A review of the past and a look at the future. In: Sedjo, R.A., ed. Governmental interventions, social needs, and the management of U.S. forests. pp.5-49.

179 Cole, L.A., 1984. Michigan's Forest Resource Strategic Plan: A marketing and investment strategy. Lexington, KY, Council of State Governments. 8 pp.
A plan to achieve both the goal of economic development and conservation of natural resources. Provides "state officials with a comprehensive analysis of the present and future role of forests in Michigan's economy." (p.2).

180 Cole, L.A., 1984. Mississippi's forests: A plan for economic and social development. Lexington, KY, Council of State Governments. 7 pp.
"Central to Mississippi's planning effort is the concept that forests are significant natural and economic resources whose management is integral to broader state goals and policies." (p.7).

181 Cole, L.A., 1985. Legislative actions in forest policy and planning: Four states' experiences. Lexington, KY, Council of State Governments. 12 pp.
"Forty-eight states are in the process of developing or implementing long-range forest resource plans, designed to enhance the multiple values of forest in accord with state economic and social needs." Four states, California, Maryland, Minnesota and New Hampshire have taken the process a step further. (p.1).

182 Cortner, H.J., 1984. National public forestry planning in the United States. In: Nagumo, H. et al., eds. Proc. IUFRO Symposium on Forest Management Planning and Managerial Economics. pp.35-47.
"One of the major new developments in the area of forest policy in recent years has been the increased emphasis placed on integrated, multiple-use forest planning." (p.45)

183 Deltuvas, R., 1982. Timber production planning in Lithuanian SSR. Helsingin Yliopiston Metsanarvioimistieteen Laitoksen Tiedonantoja no. 16. 10 pp.

184 Depta, D.J., 1984. Integrated forest planning systems at Weyerhaeuser Company. In: Nagumo, H. et al., eds., Proc. IUFRO Symp. on Forest Management Planning and Managerial Economics pp. 184-194.

185 Ellefson, P.V., 1984. Organizational patterns and administrative requirements for development of forest plans: The case of state governments in the United States. In: Nagumo, H. et al., eds. Proc. IUFRO Symposium on Forest Management Planning and Managerial Economics. pp.48-62.

186 Eriksson, L.O., 1983. Column generation applied to long range forestry planning models. Sveriges Lantbruksuniversitet, Inst. for Skogsteknik,

Rapport nr. 155. 38 pp. + app. (In English, Swedish summary).
"The report deals with methods of solving linear programming problems pertaining to long range forestry planning." (abstract).

187 Eriksson, L.O., 1983. Long range forestry planning: A case study of a forest in a transition period. Sveriges Lantbruksuniversitet, Inst. for Skogsteknik, Rapport no. 154. 78 pp.
"A model for long range forestry planning is presented... Projections are made in a stand simulation model and the planning problem is solved with a linear programming model." (abstract).

188 Eubanks, T.R., 1984. Industry perspectives of land use regulation - workable practices and problem areas. In: Lortie, M., ed., Forest resources management - the influence of policy and law, pp. 347-351.

189 FAO, 1984. Land evaluation for forestry. FAO Forestry Paper no. 48. 123 pp.
"The principles and methods described here will be found applicable to most forest land use situations." (p.iii).

190 Frantz, R.S. and Christensen, J., 1984. The use of consensus methodologies in natural resource planning. In: Nagumo, H. et al., eds. Proc. IUFRO Symp. on Forest Management Planning and Managerial Economics. pp. 720-728.
"This paper describes the consensus methodologies of Interactive Planning as used in the Southern Region of the U.S. Forest Service to increase the effectiveness and the quality of decisions involved in forest land management planning." (p.720).

191 Garcia, M.W., 1983. Public involvement and social impact assessment: A case history of the Coronado National Forest. In: Daneke, G.A. et al., eds. Public involvement and social impact assessment. Boulder, Colorado, Westview Press. pp.195-206.

192 Garcia, O., 1984. FOLPI, a forestry-oriented linear programming interpreter. In: Nagumo, H. et al., eds. Proc. IUFRO Symp. on Forest Management Planning and Managerial Economics. pp.293-305.
"FOLPI is a Linear Programming-based planning system that can be used by forest managers without a detailed knowledge of Linear Programming." (p.293)

193 Gelens, H.F., 1984. Land evaluation for forestation. In: Wiersum, K.F., ed., Strategies and designs for afforestation, reforestation and tree planting, Wageningen, Pudoc. pp. 219-230.

194 Goulding, C.J., 1984. Yield regulation and management planning in a decentralized organization. In: Nagumo, H. et al., eds. Proc. IUFRO Symp. on Forest Management Planning and Managerial Economics. pp. 134-145.

195 Griess, O., 1984. Forest management planning yesterday-today-tomorrow: Evolution of practice and research and the problems of S4.04-00 in the future. In: Nagumo, H., et al., eds. Proc. IUFRO Symposium on Forest Management Planning and Managerial Economics. pp.8-11.

196 Harrison, T.P., 1983. Design and development of a decison support

system for forest management planning with multiple objectives. Ph.D. thesis, University of Tennessee. Ann Arbor, University Microfilms Int. 170 pp.

197 Helles, F., 1983. An outline of the present state of forest management planning in Denmark. In: Carcea, F., coord. Forest management in various countries of the world, Bucharest, IUFRO. pp.61-67.

198 Hosking, M.R. and Bignell, A.W., 1984. Management planning for New Zealand's state forests. In: Nagumo, H. et al., eds. Proc. IUFRO Symposium on Forest Management Planning and Managerial Economics. pp. 109-127.

199 Iverson, W.D., 1984. Research needed to improve the quantification of scenic resources in forest planning. In: Nagumo, H. et al., eds., Proc. IUFRO Symp. on Forest Management Planning and Managerial Economics. pp. 729-740.

200 Jensen, G.S., 1984. Inventory in relation to land managemnt planning: A forest view. In: Lund, H.G., ed., Preparing for the 21st century, U.S. For. Serv., pp. 228-231.

201 Jobstl, H.A., 1984. Recent advances and current problems in forest management planning and control in Austria. In: Nagumo, H. et al., eds., Proc. IUFRO Symp. on Forest Managment Planning and Managerial Economics. pp. 167-174.

202 Klindt, T.H. and Park, W., 1984. Forestry and agricultural competition for land in the southeast. In: Retention of Farmland: Proc. of a Regional Workshop, 1983. Southern Rural Development Center and Farm Foundation, SRDC no. 73; SNREC no. 19. pp. 1-17.

203 Knopp, T.B. and Bruder, M.D., 1985. The language of land use. Northern Journal of Applied Forestry 2:9-11.

204 Krutilla, J.V., Bowes, M.D. and Wilman, E.A., 1983. National forest system planning and management: An analytical review and suggested approach. In: Sedjo, R.A., ed., Governmental interventions, social needs, and the management of U.S. forests. pp. 207-236.

205 Leisz, D.R., 1983. Impacts of the RPA/NFMA planning process on management and planning in the Forest Service. In: Sedjo. R.A., ed., Governmental interventions, social needs, and the management of U.S. forests, pp. 245-257.

206 Lund, H.G., ed., 1984. Preparing for the 21st century: Proceedings of the Forest Land Inventory Workshop, Denver, Colorado, March 26-30, 1984. U.S. Forest Service, Division of Timber Management. 334pp.

207 McCann, B.D., and Ellefson, P.V., 1983. Administrative environment for planning: The case of statewide forest resources programs in the United States. Resource Management and Optimization 2:205-224.

208 McGuire, J.R., and Behan, R.W., 1985. National forest planning: Will it ever end? American Forests, 91(3): 10-11, 44-45, 50, 52-53.
Authors give divergent opinions relating to the success of RPA and NFMA in guiding national forest planning.

209 Mealey, S.P., 1984. Solving the diversity problem in forest planning. In: Cooley, J.L. and Cooley, J.H., eds. Natural Diversity in Forest Ecosystems. pp. 267-282.

"National forests are legally required to provide for diversity of plant and animal communities and tree species in forest plans." (p.267).

210 Miller, D. and Rose, R., 1985. Changes in the urban land base and the consequences for the future of forestry. In: Sedjo, R.A., ed. Investments in forestry. pp.73-119.

"The effects of urban land development on forestry take two forms: (1) increased demand for space by urban activities outbids commercial forestry uses and results in the conversion of forest land to other uses; (2) urban development in the vicinity of lands in commercial forest production usually results in land use conflicts, which can severely limit conventional forest management practi

211 Nagumo, H. et al., eds., 1984. Proceedings IUFRO Symposium on Forest Management Planning and Managerial Economics, University of Tokyo, Oct. 15-19, 1984. Tokyo, Organizing Committee of IUFRO Symp. on For. Man. Plan. and Man. Econ. Avail. from University of Tokyo, Dept of For., For. Man. Lab. 812 pp.

The theme of the symposium was "Forest Planning for Improved Management - Research and Practice."

212 Navon, D. and Veiga, G., 1984. Estimating optimality loss in linear programming aggregation: Application to forest planning models. In: Nagumo, H., et al., eds., Proc. IUFRO Symp. on Forest Management Planning and Managerial Economics. pp. 431-443.

The authors "discuss the effects of reducing the level of detail of forest planning linear programming models." (p.431).

213 Oshima, K., 1984. Development of the Forest Planning System in Japan and its management tasks. In: Nagumo, H. et al., eds. Proc. IUFRO Symposium on Forest Management Planning and Managerial Economics. pp. 63-73.

214 Oswald, D.D., 1984. Timber information needs for national timber assessments -1989 and beyond. In: Lund, H.G., ed., Preparing for the 21st century, U.S. Forest Service, pp. 21-24.

"for future assessments... both descriptive information and data structured for analysis at the regional and national levels will be needed for the Forest Service's national planning effort." (p.24).

215 Parker, I., 1984. The National Forest Mangement Act - attainment of multigoal planning for an uncertain future. In: Nagumo, H. et al., eds. Proc. IUFRO Symposium on Forest Management Planning and Managerial Economics. pp. 408-420.

216 Rose, D.W., 1984. A critical review of mathematical programming in forest resource planning. In: Nagumo, H. et al., eds. Proc. IUFRO Symp. on Forest Management Planning and Managerial Economics. pp.306-317.

217 Rudra, A.B., 1984. Development of information structures for forest management planning. In: Nagumo, H. et al., eds. Proc. IUFRO Symp. on Forest Management Planning and Managerial Economics. pp.528-542.

218 Runyon, K.L., 1982. Cost effective timber management planning: A problem analysis for the province of Nova Scotia. Ph.D., Michigan State University. Ann Arbor, University Microfilms Int., 159pp.

219 Sample, V.A., Jr., and Kirby, P.C., 1983. National forest planning: A conservationist's handbook. Washington, D.C., Wilderness Society, 2d ed., 121pp.
"The purpose of this handbook is to present a number of fundamental environmental concerns that may arise in regional guides or forest plans. The handbook sets out pertinent portions of applicable laws and regulations about forest management as well as the concerns of conservationists about their implementation." (p.10)

220 Schlatterer, E.F., 1984. Practical strategies for providing for diversity in forest land management planning. In: Cooley, J.L. and Cooley, J.H., eds. Natural Diversity in Forest Ecosystems. pp. 231-233.

221 Shannon, M.A., 1984. New dimensions in the policy and legal aspects of forest land management. In: Lortie, M., ed. Forest resources management - the influence of policy and law, pp. 326-333.
"land management planning is less a technical resource allocation problem and more a political and social process of resource policy formation...." (p.326).

222 Siitonen, M., 1983. A long term forestry planning system based on data from the Finnish National Forest Inventory. In: Kuusela, K. and Nyyssonen, A., eds. Forest inventory for improved management. Helsingin Yliopiston Metsanarvioimistieteen laitos Tiedonantoja 17:195-207.
"In Finland, continuously repeated national forest inventories produce information for long term national timber production planning." (p.201)

223 Skok, R.A. and Buckman, C.B., 1983. A status report on the Great Lakes forest: New resource concepts and management issues. In: Flader, S.L., ed. The Great Lakes forest; an environmental and social history. Minneapolis, University of Minnesota Press. pp.223-242.
"State-level comprehensive planning and management-program evaluation are necessary to take advantage of new opportunities" for the Great Lakes Forest. (p.241)

224 Smith, R.S. and Budd, R.E., 1982. Land use in Upland Cumbria: A model for forestry/farming strategies in the Sedberg Area. Stirling, UK, University of Stirling, Technological Economics Research Unit. Research Monograph in Technological Economics no. 4. 76pp.
"This research monograph investigates a potential planning method which looks at the use of land for agricultural activities and forestry through a simple modelling approach." (p.1)

225 Suzuki, T., 1984. The Gentan probability, a model for the improvement of the normal forest concept and of forest planning. In: Nagumo, H. et al., eds. Proc. IUFRO Symp. on Forest Management Planning and Managerial Economics. pp. 12-24.

226 Walker, J.L., 1983. National forest planning: An economic critique. In: Sedjo, R.A., ed. Governmental interventions, social needs, and the management of U.S. forests. pp.263-296.

"The purpose of this chapter is to provide a critique of the economics involved in National Forest Management Act (NFMA) planning." (p.263)

227 Weisz, R., 1984. Land management planning research and development. In: Nagumo, H. et al., eds. Proc. IUFRO Symp. on Forest Management Planning and Managerial Economics. pp.757-764.

Describes a software package called SALT which translates timber yield data produced by RMYLD into information required by FORPLAN.

228 White, J., 1984. Land management planning and monitoring in the 1990's. In: Lund, H.G., ed. Preparing for the 21st Century. U.S. Forest Service. pp.25-27.

229 Wong, C.P., Renton, D.A., and Bartlett, E.T., 1984. Implications of a multilevel approach to the Forest Service planning process. In: Lortie, M., ed. Forest resources management--the influence of policy and law. pp.206-208.

Planning and decision making in the U.S. Forest Service "occur on several different levels, using different types of information at each level." (p.206)

230 Yang, Y.-C., 1984. Introducing intensive management planning methods to subtropical forests. In: Nagumo, H. et al., eds. Proc. IUFRO Symp. on Forest Management Planning and Managerial Economics. pp.248-252.

231 Yu, Z.Z., 1984. Suggestions for improvement of the forest management plans in China. In: Nagumo, H. et al., eds. Proc. IUFRO Symposium on Forest Management Planning and Managerial Economics. pp.91-99.

## APPRAISAL AND VALUATION

232 Anas, A., 1984. Land market theory and methodology in wildland management. In: Peterson G.L. and A. Randall, eds. Valuation of wildland resource benefits. pp. 89-114.

"This paper provides an analysis of the application of land market theory and methodology to the valuation of prices and unpriced benefits obtainable from wildlands as a result of public land management policies and strategies." (p.89).

233 Fukuoka, K., 1982. Formation of value and evaluation of forests. In: Japanese Forest Economic Society. The current state of Japanese forestry (II), pp. 99-105.

234 Gilligan, G.S. & Assoc., Inc., 1983. Timberland prices in the United States, 1983. Stamford, Conn. 120 pp.

The purpose of this report "is to provide data on current prices and historical trends in the price of land suitable for growing timber in all regions of the United States." (p.1).

235 Hardie, I.W., 1984. Comparative rents for farmland and timberland in a subregion of the South. Southern Journal of Agricultural Ecomomics 16(2):45-53.

"This study compares equivalent annual rents for two alternative land uses in a region where farming and timber plantations coexist. The comparison is motivated by the possibility that rising timber prices may stimulate timber processors to compete for farmland." (p.45).

236 Hickman, C.A., 1982. Use value assessment of forest lands in the south. In: Granskog, J.E. and Haney, H.L., Jr., eds. How to cope with hard times: Proc. Southern For. Econ. Workshop. pp.115-135.

237 Hyde, W.F., 1984. Timber valuation. In: Peterson, G.L. and Randall, A., eds. Valuation of wildland resource benefits. pp.131-141.

"Examines the demand price appraisal for standing timber" (stumpage). (p.131)

238 Johansson, L. and Westerlund, B., 1985. Aptering och vardering av staende skog. Sveriges Lantbruksuniversitet Avdelningen for Skogsuppskattning och Skogsindelning, Rapport 13. 24 pp. (In Swedish; English Summary).

Title of English summary: "Assortment estimation and valuation of standing forest." In addition to valuation, the system described "may be used for price-list analysis, establishment of price-lists and for effective stock-keeping of standing forests." (p.2).

239 Ley, C. and Matthies, F., 1985. Valuation techniques for forest damages caused by air pollution. Der Forst- und Holzwirt 40:118,120,122,124-127. (In German). Forest damages in terms of value find expression in a change of inflow and outflow of funds in forest enterprises. A

quantification of the damages can result from a current registration of these changes of payment streams or from a forecast of all future changes and their representation in a capitalized value or an anuity. (WK)

240 McConnell, K.E., 1984. An approach to assessing the contingent or hypothetical valuation method. In: Stoll, J.R. et al., eds., Nonmarket valuation: Current status and future directions. SNREC Publ. 18:38-55.
"Researchers can use this approach to evaluate the benefits of potential changes, such as introducing a recreation site when by definition data on actual choices are not available." (p.38)

241 Michie, B.R., 1985. Uneven-aged stand management and the value of forest land. Forest Science, 31:116-121.
"A matrix growth model of a selection forest is used to investigate the Land Expectation Value of forest land managed under an uneven-aged management system." (p.116)

242 Miller, J.L., 1982. Control and protection of forest assets: Timber purchases. In: Sizemore, W.R., ed. Accounting for the money that grows on and is spent on trees. pp. 27-34.

243 Moulton, R.J., 1983. An investigation of the market for forest lands in northern Minnesota, the Missouri Ozarks, and Mississippi. Ph.D. thesis, Michigan State University., Ann Arbor, University Microfilms Int., (publ. 1984), 136pp.
"Describes and evaluates trends in forest land prices...." (abstract)

244 Pertz, K., 1985. Forest land values in an evolving environment. Forstarchiv 56:36-40.
(In German; English summary). The traditional Faustmann solution to the timber harvesting problem was designed for a purely static environment in which prices, cost and technology were constant. A modified Faustmann-model is presented, explicitly allowing fluctuations in prices, costs and interest rates. (WK)

245 Peterson, G.L. and Randall, A., eds., 1984. Valuation of wildland resource benefits. Boulder, Westview Press. 258 pp.

246 Randall, A., 1984. Benefit estimation for scenic and visibility services. In: Peterson, G.L. and A. Randall, eds. Valuation of wildland resource benefits. pp. 193-207.

247 Randall, A., 1984. The conceptual basis of benefit cost analysis. In: Peterson, G.L. and A. Randall, eds. Valuation of wildland resource benefits. pp. 53-63.

248 Randall, A., 1984. Frontiers of nonmarket valuation. In: Stoll, J.R. et al., eds. Nonmarket valuation: Current status and future directions. SNREC Publ. no. 18, pp. 107-125.

249 Shabman, L., 1984. Nonmarket valuation and public policy: Historical lessons and new directions. In: Stoll, J.R. et al., eds. Nonmarket valuation: Current status and future directions. SNREC Publ. no. 18. pp.62-99.

250 Stoll, J.R., 1983. Recreational activities and nonmarket valuation: The

conceptualization issue. Southern Journal of Agricultural Economics 15:119-125.

251 Stoll, J.R., Shulstad, R.N., and Smathers, W.M., Jr., eds., 1984. Nonmarket valuation: Current status and future directions. Proceedings of a regional workshop, May 1983, Biloxi. Southern Natural Resource Economics Committee, SNREC Publication no. 18. 130pp.

A discussion of the "valuation of goods, services, and amenities which are not exchanged in competitive markets." (p.vii) Includes four papers on the valuation of recreational activities.

252 Stoll, J.R., Smathers, W.M., Jr., and Shulstad, R.N., 1984. An overview of current issues in nonmarket valuation. In: Stoll, J.R. et al., eds. Nonmarket valuation: Current status and future directions. SNREC Publ. no. 18, pp. 1-29.

Discusses two techniques "currently acceptable for valuation of water and related land resources which are not traded in markets: the travel cost (TCM) and contingent valuation (CVM) methods." (p.5)

## INVESTMENT AND FINANCE

253 Albers, C.A., 1984. Reforestation on company-owned lands in the South: Determinants of investment behavior. N.C. State Univ. Small Woodlot Forestry R & D Program, Res. Note Ser. no.45. 89 pp.

254 Bingham, C.W., 1985. Rationale for intensive forestry investment: A 1980's view. In: Sedjo, R.A., ed., Investments in forestry. pp. 21-31.
Among the topics covered are: "(1) Types of risk and uncertainty encountered in long-term forestry investments, and (2) the need for taking account of global supply and demand in making investment decisions...." (p.21).

255 Blandon, P., 1984. Some tentative contributions to forest planning from resource economics. In: Nagumo, H. et al., eds., Proc. IUFRO Symp. on Forest Management Planning and Managerial Economics, pp. 654-664.
"The basic assumptions in this paper are that the price of timber is closely related to the cost of extracting timber from natural forests far from the centres of demand and that the price of timber need not necessarily rise as a result of increasing scarcity." (p.662).

256 Brodsky, G.L., 1982. Financing forestry investments: Today's market environment. In: Goetzl, A. and J.P. Royer, eds., Financing forestry investments, pp. 53-61.
The author addresses "the current market environment for financing forestry investments - specifically the factors which are motivating forest products companies and investors." (p.53).

257 Burris, J.J., 1982. Valuation of forest products stocks. In: Sizemore, W.R., ed. Accounting for the money that grows on and is spent on trees. pp. 88-91.

258 Butt, P.A., 1982. Methods of financing logging machinery. In: Logging Machinery Seminar, Rotorua, N.Z., 1982, Proc., pp. 157-162.

259 Campbell, J., 1984. The outlook for institutional investment in British forestry. Journal of World Forest Resource Management 1:105-115.

260 Clark, B.G., 1983. Investment needs in forest land as seen by the landowner from the northeast Lake States. In: McCarthy, J.A., ed., Forest land investment, pp. 49-52.
The author is the owner of a Michigan tree farm.

261 Clawson, M., 1985. Problems of public investment in forestry. In: Sedjo, R.A., ed. Investments in forestry. pp.167-185.

262 Clephane, T.P., 1982. Valuation of stocks of forest products firms in actual or threatened acquisitions, mergers, or sales. In: Sizemore, W.R., ed. Accounting for the money that grows on and is spent on trees. pp.78-87.
The author concludes: "We will see greater interest in the direct

investment in timberlands particularly in the South." (p.87)

263 Condrell, W.K., 1982. Partnerships and pension trusts as sources of timber investment. In: Goetzl, A. and J.P. Royer, eds., Financing forestry investments, pp. 67-72.

264 Corser, D., 1982. Equity participation in timber by pension funds. In: Goetzl, A. and J.P. Royer, eds. Financing forestry investments. pp.62-66.
The author is vice president with Equitable Life Assurance Society.

265 Crowell, J.B., Jr., 1984. Can timber growing investments be profitable? Journal of Forestry 82:536-538.

266 Dederich, P.K. and Stier, J.C., 1984. Establishing the basis of forestry assets. University of Wisconsin, School of Natural Resources, Staff Paper Series no. 18. 7 pp. + figures & appendix.
"This paper and the worksheet it introduces are designed to assist in determining what the basis of timberland assets was at the time the assets were originally acquired." (p.1).

267 Dickens, R.L., 1982. An introduction to financial statements. In: Sizemore, W.R., ed., Accounting for the money that grows on and is spent on trees. pp. 1-7.

268 Dutrow, G. and Conklin, M., 1983. Improving approaches to estimating timber production opportunities on private forest lands. In: Seppala, R., C. Row, and A. Morgan, eds. Forest sector models, pp. 151-159.
"This paper describes methodology and results of a recent study to estimate nationwide opportunities to increase timber supplies through economic investments in forestry management." (p.151).

269 Dutrow, G.F. and Kaiser, H.F., 1982. Economic opportunities for investments in forest management in the southeastern United States. In: Goetzl, A. and J.P. Royer , eds. Financing forestry investments, pp. 7-17.

270 Fraser, D.L., 1982. Sustained yield on nonfederal forest land ownerships. In: LeMaster, D.C., et al., eds. Sustained yield, pp. 23-27.
A discussion of "problems relating to economic decision-making techniques used in evaluating investments in forest management including those associated with implementing a sustained yield policy." (p.23).

271 Ghegan, W.S., 1982. Effects of timberland revenues and costs on financial statements. In: Sizemore, W.R., ed., Accounting for the money that grows on and is spent on trees. pp. 14-19.

272 Goetzl, A. and Royer, J.P., eds., 1982. Financing forestry investments: Attracting private capital to timber and timberland. Washington, D.C., National Forest Products Assoc. 117 pp.

273 Gunter, J.E. and Haney, H.L., Jr., 1984. Essentials of forestry investment analysis, Gunter-Haney, 1st ed., 337 pp.
"begins with a discussion of interest concepts, proceeds through basic interest formulas, and decision criteria. Investment principles are then applied to forestry problems." (p.iv).

274 Harou, P., 1983. Monitoring the profitablity of forestry projects. In: Bell, J.F. and T. Atterbury, eds., Renewable resource inventories for monitoring changes and trends. pp 129-132

"A monitoring of the financial and economic profitablility of forestry projects through pre and post implementation cash flows comparison and an adequate feedback mechanism is important to direct managerial actions." (p.129).

275 Harou, P.A. and Zheng, C.L., 1984. Forestry management by feedbacks. In: Nagumo, H., et al., eds., Proc. IUFRO Symp. on Forest Management Planning and Managerial Economics. pp. 741-756.

"Periodic feedbacks should insure that deviations from cost and benefit estimates remain in reasonable limits... The alternative test (ALT) is the feedback mechanism that should be used to monitor and appraise forestry projects." (p.755).

276 Harou, P.A., 1983. Quanitification of the uncertainty and risk of forestry projects. Yale University School of Forestry and Environmental Studies. Mimeo. 12 pp.

277 Harou, P.A., 1984. Possibilities for shadow pricing forestry investments. Forest Ecology and Management 8:59-73.

278 Harpole, G.B., 1984. Internal rate of return may be used to define initial equity for composite rate-of-return analyses. Forest Science 30:1096-1102.

279 Haygreen, J.H., 1982. The Georgia-Pacific experience: Control of raw material from the woods to the mill. In: Sizemore, W.R., ed. Accounting for the money that grows on and is spent on trees. pp.58-65.

280 Heinemann, G.L., 1983. Wood in the U.S. economy in the short term (2000). In: McCarthy, J.A., ed. Forest land investment. pp.19-25.

281 Hinson, J.M., 1982. Possible applications of reverse mortgages for forestry investments. In: Goetzl, A. and J.P. Royer, eds., Financing forestry investments, pp. 73-79.

282 Hotvedt, J.E., 1982. Economic analysis of intensive timber management. In: Clason, T., ed. Multiple use land management for nonindustrial pine forest landowners, pp. 67-75.

283 Hunter, L.A.J., 1984. Financial planning of forests for national accounting purposes. In: Nagumo, H. et al., eds. Proc. IUFRO Symp. on Forest Management Planning and Managerial Economics. pp.628-639.

"The effect upon the forestry sector of the introduction of U.N. System of National Accounts (SNA) into New Zealand national accounting is described." (p.628)

284 Kaiser, H.F. and Royer, J.P., 1984. The appropriate role of U.S. government programs in fostering U.S. forest investment. In: Schmithusen, F., ed. Forestry legislation. pp.60-70.

285 Kaiser, H.F., 1982. How the practice of sustained yield on public lands influences nonindustrial private forest investments. In: LeMaster, D.C.

et al., eds. Sustained Yield. pp.109-113.

286 Krause, L.B., 1983. Outlook for U.S. and world economies. In: McCarthy, J.A., ed., Forest land investment, pp. 4-8.
The author states that the forest products industry would benefit from "a change in the policy mix; less stimulative fiscal policy and more stimulative monetary policy.' (p.8).

287 Kronrad, G.D. and de Steiguer, J.E., 1983. Relationships between discount rates and investment lengths among nonindustrial private forest landowners. In: Royer, J.P. and C.D. Risbrudt, eds., Nonindustrial private forests... Symp. Proc., pp. 109-112.

288 Malm, R.L., 1982. Controlled timber, fee and leased. In: Sizemore, W.R., ed., Accounting for the money that grows on and is spent on trees. pp.35-42.

289 McCarthy, J.A., editor, 1983. Forest land investment: Opportunities and needs: Proceedings of the 108th annual meeting, American Forestry Assoc., Oct. 2-5, 1983. Proc. compiled by Willard R. Tikkala. Washington, D.C., American Forestry Association, 152pp.

290 McGuire, J.R., 1983. Investment needs in forest land as seen by the public sector. In: McCarthy, J.A., ed., Forest land investment, pp.43-48.

291 Merlo, M., and Defrancesco, E., 1984. Accounting and planning in forestry: Some experiences in the Veneto Region of Italy. In: Nagumo, H., et al., eds., Proc. IUFRO Symp. on Forest Management Planning and Managerial Economics, pp.640-653.

292 Milliken, R.B., 1983. New financial instruments: Leasing arrangements (including purchase and leaseback). In: McCarthy, J.A., ed., Forest land investment, pp. 84-88.

293 Pearse, P.H., 1984. Obstacles and incentives for silviculture in Canadian forest policies. In: Lortie, M., ed., Forest resources management - the influence of policy and law, pp. 35-41.
Most of the land and timber in Canada is the property of the Crown, but "virtually all production and much of the forest management is left to private enterprise." (p.35).

294 Peterson, R.M., 1983. Wood in the U.S. economy in the long term (2030). In: McCarthy, J.A., ed., Forest land investment, pp. 27-33.

295 Pitsenbarger, P.M., 1982. Book versus tax accounting for forestry costs. In: Sizemore, W.R. ed. Accounting for the money that grows on and is spent on trees. pp. 8-13.

296 Raper, C.F., 1983. Investment opportunities - as seen by the investment community: Insurance companies. In: McCarthy, J.A., ed., Forest land investment. pp. 56-61.
The author is an executive with Travelers Insurance Co.

297 Rodwell, R.O., 1982. Public investment vehicles in southern timberland. In: Granskog, J.E. and Haney, H.L., Jr., eds. How to cope

with hard times: Proc. Southern For. Econ. Workshop. pp.136-142.

298 Rostow, W.W., 1985. The Fifth Kondratieff Upswing and the Fourth Industrial Revolution: Their meaning for forestry. In: Sedjo, R.A., ed. Investments in forestry. pp.11-19.

299 Sedjo, R.A., 1985. Investments in forestry: Resources, land use, and public policy. Boulder, Colorado, Westview Press. 246pp.
Papers included were presented at a national symposium on forestry investment opportunities held in Denver, Jan., 1983.

300 Sizemore, W.R., ed., 1982. Accounting for the money that grows on and is spent on trees. Seminar Proceedings, May, 1981. Durham, NC, Duke University School of Forestry and Environmental Studies. 91pp.

301 Smith, H.D., 1983. Economics of intensive forestry. In: Proceedings of the Symposium on the Loblolly Pine Ecosystem (East Region), Raleigh, 1982. pp. 246-254.
This paper discusses some of the issues involved in evaluating forestry investments. "If forestry investments are to be competitive with nonforestry alternatives, foresters must consider cost-effective management techniques." (p.253)

302 Tarver, C.M., 1983. Investment opportunities - as seen by the investment community: Commercial and investment banking firms. In: McCarthy, J.A., ed., Forest land investment, pp. 62-66.
The author is an executive with the First Atlanta Corporation.

303 Teeguarden, D.E., 1985. Effects of public policy on forestry investments. In: Sedjo, R.A., ed. Investments in forestry. pp. 215-240.

304 Vasievich, J.M., 1983. Productivity potentials of harvested forestland in the south. In: Royer, J.P. and C.D. Risbrudt, eds. Nonindustrial Private Forests... Symp. Proc. pp. 85-90.

305 Vasievich, J.M., 1983. Constraints and risks: Physical losses/risks. In: McCarthy, J.A., ed. Forest land investment. pp.98-113.
"Several management responses are available to limit the risk of forest production." (p.107)

306 Waggener, T.R., 1985. The economics of shifting land use margins. In: Sedjo, R.A., ed. Investments in forestry. pp.35-71.

307 Weber, W., 1984. Das forstbetriebliche Rechnungswesen als Subinformationssystem: Eine Grundlagendarstellung. Eidgenossische Anstalt fur das Forstliche Versuchswesen, Mitteilungen 60(3):305-505. (in German; Eng. summary).
English title: Managerial accounting in forestry as an information subsystem: A description of basic elements.

308 Yoho, J.G., 1985. Continuing investments in forestry: Private investment strategies. In: Sedjo, R.A., ed. Investments in forestry. pp.151-166.

TAXATION

309 Baughman, M.J., 1984. What you need to know about taxes. In: Proceedings Woodland Owners and Users Conference, St. Paul, 1984. University of Minnesota, Office of Special Programs, pp. 52-60.

310 Boulter, D.W.K., 1984. Taxation and the forestry sector in Canada. Canadian Forestry Service, Economics Branch, Information Report E-X-33. 113pp.
"Attempts to bring together the highlights and significant changes in the tax system at all three levels of political jurisdiction in Canada as they impact forestry and the forest sector...." (p.iii)
"Specifically describes the array of taxes that impact on commercial activities in the forest sector...." (p.iii)

311 Chang, S.J., 1983. Reforestation by nonindustrial private landowners: Does the capital gains tax matter? In: Royer, J.P. and C.D. Risbrudt, eds. Nonindustrial Private Forests... Symp. Proc. pp. 142-145.

312 Condrell, W.K., 1983. Constraints and risks: Timber tax policies. In: McCarthy, J.A., ed., Forest land investment, pp. 95-97.

313 Dederich, P.K. and Stier, J.C., 1984. Tax records for timber cut for use in a trade or business. University of Wisconsin, School of Natural Resources, Staff Paper Series no. 19. 6 pp. + figures and appendix.

314 Haney, H.L.,Jr. and Siegel, W.C., 1983. State death tax implications for the nonindustrial private forest landowner. In: Royer, J.P. and C.D. Risbrudt, eds., Nonindustrial Private Forests... Symp. Proc., pp 123-133.

315 Iwai, Y., 1982. Problems of the forestry taxation system in Japan. In: Japanese Forest Economic Society. The current state of Japanese forestry (II). pp. 123-131.

316 Kilgore, M.A., Ellefson, P.V., and Skok, R.A., 1984. Minnesota's 1982-83 forest property tax structure: A review and evaluation. Minnesota Forestry Research Notes no. 287. 4pp.

317 Main, A., 1982. Timber and federal income tax. In: Clason, T., ed. Multiple use land management for nonindustrial pine forest landowners, pp. 89-94.

318 Max, W. 1983. Landowner response to alternative tax policies in Santa Cruz County, California. In: Royer, J.P. and C.D. Risbrudt, eds., Nonindustrial Private Forests...Symp. Proc., pp.134-141.

319 New Zealand Forest Service, 1983. Forestry taxation: A guide for the forest grower. Wellington, 3rd ed. 22 pp.

320 Rinehart, J.A. and Maclean, R.M., 1983. Forest taxation in

California: A guide to federal and state laws. Sacramento, Northern California Society of American Foresters and California Dept. of Forestry. SAF Publication 83-003. various pagings.

321 Rodgers, G.W., 1984. Wisconsin's forest tax laws can benefit the forest owner. In: Proceedings Woodland Owners and Users Conference, St. Paul, 1984. University of Minnesota, Office of Special Programs. pp.100-102.

322 Siegel, W.C. and Haney, H.L., Jr., 1983. State income tax implications for the nonindustrial private forest landowner. In: Royer, J.P. and C.D. Risbrudt, eds. Nonindustrial Private Forests... Symp. Proc. pp. 113-122.

323 Stewart, K.C., Jr., 1983. West Virginia taxation. In: Dempsy, G.P. and K.S. Price, eds. Governor's Conference on West Virginia's Forest Industry, pp. 185-192.
"The purpose of this paper is to review the taxation of West Virginia's forest industry relative to neighboring states from both a manufacturing and timberland perspective." (p.185).

324 Utz, K.A., 1982. Impact of taxation on forest regeneration. In: Haymond, J.L., coord. Cost-effective regeneration practices. pp.5-12.
The passage of PL 96-451 in 1980 "provided a significant tax incentive for those investing in pine regeneration." (p.12)

325 Zigmund, H., Chairman, 1984. Minnesota's tax policy and the state's forestry and forest industry: A statement prepared by the Governor's Commission on Wood Products. In: Friedman, J. The taxation of timber. Appendix 1. 15pp. A discussion paper prepared for the Minnesota Tax Study Commission.

## SUBSIDIZATION

326 Bangman, G. and Goransson, M., 1984. Effects from subsidies to forestry on timber production and regional employment. In: Tervo, M. and J.A. Selby, eds. Symposium on Forest Products and Roundwood Markets, Hanasaari, 1983. Metsantutkimuslaitoksen Tiedonantoja no. 141; Scandinavian Forest Economics no. 27, pp. 134-149.
"subsidies to forestry could be a profitable way to reduce unemployment in the depressed areas." (p.134).

327 Boyd, R., 1983. The effects of FIP and forester assistance on nonindustrial private forests. In: Royer, J.P. and C.D. Risbrudt, eds. Nonindustrial Private Forests... Symp. Proc. pp. 189-203.

328 Boyd, R., 1984. Government support of nonindustrial production: The case of private forests. Southern Economic Journal 51(1):89-107.
"The purpose of the present study is to examine the impact of programs such as FIP on the supply of timber...." (p.89)

329 Brannlund, R., Goransson, M., and Lofgren, K.G., 1984. The effects on the short run supply of wood from subsidized regeneration measures: An econometric analysis. Sveriges Lantbruksuniv. Inst. for Skogsekonomi, Arbetsrapport no. 55. 21pp.
"The purpose of this paper is to analyse whether regionally concentrated subsidies directed towards forestry have had any short run effect on timber supply in northern Sweden." (p.1)

330 Cohen, M.A., 1983. Public cost-share programs and private investment in forestry in the south. In: Royer, J.P. and C.D. Risbrudt, eds., Nonindustrial Private Forests. Symp. Proc., pp. 181-188.
The author concludes that "A substantial percentage of acreage planted under FIP in a representative state in the South would have been planted had subsidies not existed. This means that FIP is not responsible for as much private investment as the enrollment of acreage in FIP might at first suggest." (p.188).

331 de Steiguer, J.E., 1982. Capital substitution in government cost-share programs: Modeling investment behavior. In: Granskog, J.E. and H.L. Haney, Jr., eds., How to cope with hard times: Proc. Southern For. Econ. Workshop. pp. 30-42.
"The analysis indicated that government cost-share programs have induced the private cash outlays for reforestation that they were designed to induce."

332 de Steiguer, J.E., 1983. The influence of incentive programs on nonindustrial private forest investment. In: Royer, J.P. and C.D. Risbrudt, eds., Nonindustrial Private Forests. Symp. Proc. pp. 157-164.

333 de Steiguer, J.E., 1984. Impacts of cost-share programs on private reforestation investment. Forest Science 30:697-704.

"This study represents one of the first attempts to develop and estimate an economic model of NIPF reforestation investment behavior." (p.704).

334 Dicks, M.R. et al., 1983. Impacts of the 1979 Forestry Incentives Program on state and federal taxes. In: Royer, J.P. and C.D. Risbrudt, eds., Nonindustrial Private Forests... Symp. Proc. pp. 217-226.

335 Dirkman, J., Rumpf, T. and Irland, L.C., 1983. Treatment size, administrative cost relationships and "washout" in forestry incentive programs in Maine. In: Royer, J.P. and C.D. Risbrudt, eds. Nonindustrial Private Forests... Symp. Proc. pp. 291-300.

336 Ellefson, P.V. and Wheatcraft, A.M., 1983. Equity and the allocation of Forestry Incentives Program funds. In: Royer, J.P. and Risbrudt, C.D., eds. Nonindustrial Private Forests...Symp. Proc. pp. 204-215.

337 Ellefson, P.V. and Wheatcraft, A.M., 1983. Equity and the allocation of Forestry Incentives Program funds. 27pp. + tables.

338 Ellefson, P.V., 1984. Encouraging growth and use of eastern hardwoods: Public and private programs for the task. Presented at the General Session of the Forest Products Research Society Annual Meeting, St. Louis, June, 1984. 17pp. + fig., 2 tables.

339 Ellefson, P.V., 1984. Encouraging growth and use of eastern hardwoods: Public and private programs for the task. Forest Products Journal 34(10):18-23.

340 Gregersen, H. and Walker, B., 1985. Forestry incentive payment recipients ten years later: A Minnesota case study. University of Minnesota Agr. Exp. Sta., Station Bull. AD-SB-2529. 25 pp.

341 Gregersen, H.M., 1984. Incentives for forestation: A comparative assessment. In: Wiersum, K.F., ed. Strategies and designs for afforestation, reforestation and tree planting, Wageningen, Pudoc. pp. 301-311.
"The purpose of this paper is to discuss the nature and use of... incentives or subsidies particularly as they relate to forestation programs in different countries." (p.301-302).

342 Harou, P.A., 1983. The economics of forestry incentives in Massachusetts: ACP, FIP, and the special yield tax. In: Royer, J.P. and C.D. Risbrudt, eds., Nonindustrial Private Forests... Symposium Proceedings. pp. 227-237.

343 Harou, P.A., 1984. Evaluation of forestry programs: The with - and without analysis. Canadian Journal of Forestry Research 14:506-511.
"Discusses the different situations encounterd in evaluating the incremental net benefit arising from several forestry incentive programs in... Massachusetts." (p.506).

344 Hickman, C. A., 1984. Analysis of financial incentives programs to encourage forestry development on private lands in Latin America. In: Laarman, J.G. and Dutrow, G.F., comp. Private enterprise initiatives for international forestry development. U.S. For. Serv., Gen. Tech. Rep. WO-40. pp.62-66.

345 Irland, L.C., 1984. Forestry cost-sharing: Lessons for evaluating public conservation programs. Renewable Resources Journal 2(5):18-22.

346 Marty, R., 1983. Retageting public forestry assistance programs in the north. In: Royer, J.P. amd C.D. Risbrudt, eds., Nonindustrial Private Forests... Symp. Proc. pp.281-287.

347 Risbrudt, C.D., 1983. Efficiency and effectiveness of the Forestry Incentives Program. In: Royer, J.P. and C.D. Risbrudt, eds. Nonindustrial Private Forests... Symp. Proc. pp. 149-156.

348 Risbrudt, C.D., Goforth, M.H., Wheatcraft, A. and Ellefson, P.V., 1983. Forestry Incentives Program investments in 1974: Retention rates through 1981. Minnesota Agr. Exp. Sta., Station Bull. 552. 32pp.
An assessment of the success of FIP.

349 Royer, J.P., 1983. The role of public assistance in reforestation efforts in the south. In: Royer, J.P. and C.D. Risbrudt, eds. Nonindustrial Private Forests... Symp. Proc. pp.288-290.

350 Wallace, T.D. and Silver, J.L., 1983. Public cost-sharing and production in nonindustrial private forests: The case of FIP in coastal Georgia. In: Royer, J.P. and C.D. Risbrudt, eds. Nonindustrial Private Forests... Symp. Proc. pp.165-180.

351 Wheatcraft, A.M., Ellefson, P.V., Risbrudt,C.D., and Goforth, M.H., 1983. Forestry Incentives Program investments in 1974: Retention through 1981 in the North. Minnesota Forestry Research Notes 286. 4pp.

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352 Brokensha, D. and Castro, A.P., 1983. Methods of fact finding. In: FAO. Wood fuel surveys. pp. 75-96.
This paper presents "some guidelines for carrying out social surveys in connection with wood fuel projects." (p.76).

353 Chandrasekharan, C., 1983. Social integration of pulp and paper industries in developing countries. In: FAO. Establishing pulp and paper mills: A guide for developing countries. FAO Forestry Paper 45:74-77.
"As a concept, social integration of an industry indicates its net contribution to the welfare of the community, directly or indirectly, by providing increased employment, income, social amenities and quality of life." (p.74).

354 de Steiguer, J.E., Kronrad, G.D., Albers, C.A. and Durst, P.B., 1984. Screening developing countries for forestry projects: A methodology. In: Laarman, J.G. and G.F. Dutrow, comp., Private enterprise initiatives for international forestry development. U.S. For. Serv., Gen. Tech. Rep. WO-40, pp. 49-52.

355 deLucia, R., 1983. Defining the scope of wood fuel surveys. In: FAO. Wood fuel surveys pp. 7-28.

356 Douglas, J.J., 1983. A re-appraisal of forestry development in developing countries. The Hauge, Martinus Nijhoff/W. Junk. 178 pp.

357 Faber, D.C. and Stolwijk, H.J.J., 1984. Role of biomass energy in rural development: A case study of Bangladesh. In: Wiersum, K.F., ed., Strategies and designs for afforestation, reforestation and tree planting. pp. 63-76.

358 FAO, 1983. Wood fuel surveys. Forestry for Local Community Development Programme, GCP/INT/365/SWE. 202 pp.
"This publication is... designed primarily to make available to those in the forestry profession relevant experience from other disciplines. It does not deal with the forestry components of studies of fuelwood situations.... Rather, it attempts to provide guidance to those responsible for planning fuelwood-related projects...." (p.iii).

359 FAO, 1983. Establishing pulp and paper mills: A guide for developing countries. Rome, Food and Agriculture Organization of the United Nations. FAO Forestry Paper no. 45. 93pp.
A collection of papers presented during the 22nd-24th sessions of the FAO Advisory Committee on Pulp and Paper, 1981-1983.

360 Granskog, J.E., 1984. How developing countries can assess their potential for wood products exports to the United States: A methodology. In: Laarman, J.G. and Dutrow, G.F., comp. Private enterprise initiatives for international forestry development. U.S. For. Serv., Gen. Tech. Rep.

WO-40. pp.56-61.
"Export growth currently occupies a key role in the economic development plans of most developing countries." (p.56)

361 Gregersen, H.M., 1984. Private enterprise in the forestry sector: Directions for AID. In: Laarman, J.G. and G.F. Dutrow, comp., Private enterprise initiatives for international forestry development. U.S. For. Serv., Gen. Tech. Rep. WO-40, pp. 41-48.

362 Harou, P.A., 1984. The choice of developing countries for forestry projects. In: Laarman, J.G. and G.F. Dutrow, comp., Private enterprise initiatives for international forestry development. U.S. For. Serv., Gen. Tech. Rep. WO-40, pp. 53-55.
"The guidelines for choosing developing countries in which to implement forestry projects differ little from the guidelines that could be used for any other development projects." (p.55).

363 Huuhtanen,H.J.I., 1983. Possibilities of cost reduction in establishing a pulp and paper industry in developing countries. In: FAO. Establishing pulp and paper mills: A guide for developing countries. FAO Forestry Paper 45:23-29.

364 Kyrklund, B., 1983. Appropriate pulp and paper technology for developing countries. In: FAO. Establishing pulp and paper mills: A guide for developing countries. FAO Forestry Paper 45:19-22.
"Although there has been general agreement on the need for appropriate technology, there is a wide range of opinion as to what appropriate technology is like." (p.19).

365 Laarman, J.G. and Dutrow, G.F., compilers, 1984. Private enterprise initiatives for international forestry development: Proceedings of a Workshop and Commissioned papers. Raleigh, N.C., 1982. U.S. For. Serv. Gen. Tech. Rep. WO-40. 66 pp.
"Twelve papers that discuss ways in which the U.S. Agency for International Development (AID) can promote indigenous private enterprise in the forest-based sectors of developing countries." (p.ii).

366 Landegger, C., 1983. Some thoughts on the question of duty protection for infant pulp and paper industries. In: FAO. Establishing pulp and paper mills: A guide for developing countries. FAO Forestry Paper 45: 72-73.

367 Levingston, R., 1984. International policy and action for forestation. In: Wiersum, K.F., ed. Strategies and designs for afforestation, reforestation and tree planting. Wageningen, Pudoc. pp.386-412.

368 Linderholm, B.A., 1983. Technical auditing of operating pulp and paper mills. In: FAO. Establishing pulp and paper mills: A guide for developing countries. FAO Forestry Paper 45:54-61.

369 McGaughey, S.E., and Gregersen, H.M., eds., 1983. Forest-based development in Latin America: An analysis of investment opportunities and financing needs. Washington, D.C., Inter-American Development Bank. 215pp.
Highlights of a conference held in Washington, D.C., June 1982, at Inter-American Development Bank headquarters. Purpose of the conference was to discuss the prospects for financing the Latin American forest-based

sector. (p.111)

370 Molleda, J., 1983. Achieving operating efficiency, meeting market needs and controlling general costs. In: FAO. Establishing pulp and paper mills: A guide for developing countries. FAO Forestry Paper 45:44-53.

371 Morgan, W.B., 1983. Urban demands: Studying the commercial organization of wood fuel supplies. In: FAO. Wood fuel surveys. pp.53-73.

Fuelwood studies have given less attention to the effect of urban demand on fuelwood production and supply than to other aspects and have tended to regard fuelwood as mainly the concern of rural consumers and producers. This tendency has "discouraged the study of the commercial organization of the fuelwood industry and of the role of fuelwood in the development process." (p.54)

372 Murdia, R., 1982. Forest development and tribal welfare: analysis of some policy issues. In: Hallsworth, E.G., ed. Socio-economic effects and constraints in tropical forest management. N.Y., Wiley. pp. 31-41.

373 Palin, D.J., 1984. Institutional arrangements for forestation. In: Wiersum, K.F., ed. Strategies and designs for afforestation, reforestation and tree planting. Wageningen, Pudoc. pp. 312-330.

Institutions which were designed to handle silvicultural problems need to be redesigned to solve social, ecological and economic problems. (p.312).

374 Pancel, L. and Wiebecke, C., 1984. Diagnostic methods for large-scale industrial forestation projects. In: Wiersum, K.F., ed. Strategies and designs for afforestation, reforestation and tree planting. Wageningen, Pudoc. pp. 231-247.

"Systems engineering, multiple-criteria analysis, cost-effectiveness analysis, cost-benefit analysis and financial analysis are compared as diagnostic methods for forestation projects." (p.231).

375 Peterson, F., 1983. Contracting, plant construction and training. In: FAO. Establishing pulp and paper mills: A guide for developing countries. FAO Forestry Paper 45:16-18.

376 Picornell, P.M., 1983. Why do developing countries go into the pulp and paper industry. In: FAO. Establishing pulp and paper mills: A guide for developing countries. FAO Forestry Paper 45:3-5.

In spite of the problems encountered, developing countries are eager to establish pulp and paper mills "because this industry is one of the indications of development." (p.3)

377 Reddy, A.K.N., 1983. Rural fuelwood: Significant relationships. In: FAO. Wood fuel surveys. pp. 29-52.

The author contends that wood is involved in a number of relationships and that the reason for the frequent failure of programs for the regeneration of wood resources in developing countries is that the nature and extent of these relationships is not fully appreciated. (p.30).

378 Runge, C.F., 1984. Common property and collective action in economic development. University of Minnesota, Center for Natural Resource Policy and Management Studies, Working Paper no. 1, 27pp.

379 Sekban, A.D., 1983. Identification of concept and feasibility studies. In: FAO. Establishing pulp and paper mills: A guide for developing countries. FAO Forestry Paper 45:6-9.
Discusses the "identification and conceptual assessment leading to the possible establishment of a forest products industry." (p.6)

380 Seve, J.E., 1984. Management training for forest industries. In: Laarman, J.G. and Dutrow, G.F., comp. Private enterprise initiatives for international forestry development. U.S. For. Serv., Gen. Tech. Rep. WO-40. pp.21-25.
"This paper focuses on certain aspects of management training in the specific context of the private forestry enterprises in developing countries." (p.21).

381 Smith, A.E., Flynn, G., and Breag, G.R., 1983. A profile of the briquetting of agricultural and forestry residues. Tropical Development and Research Institute Report G181. 12pp.
This report is intended as an aid to "planners and decision makers in developing countries involved in project identification, appraisal and financing." (p.1)

382 Stauffenberg, D. von, 1983. Financing of pulp and paper projects In: FAO. Establishing pulp and paper mills: A guide for developing countries. FAO Forestry Paper 45:10-15.

383 Stauffenberg, D. von, 1983. Implementing pulp and paper projects: The initial operating years. In: FAO. Establishing pulp and paper mills: A guide for developing countries. FAO Forestry Paper 45:38-43.

384 Taylor, G.F., II and Soumare, M., 1984. Strategies for forestry development in the semi-arid tropics: Lessons from the Sahel. In: Wiersum, K.F., ed. Strategies and designs for afforestation, reforestation and tree planting. Wageningen, Pudoc. pp.137-167.

385 Van Vlaanderen, F., 1982. Intercontinental management and the cultural effect. In: Oldeman, R.A.A., ed. Tropical hardwood utilization. pp.545-550.
The trend is toward using local talent and depending on consultants and international management organizations to train the local team to manage.

386 Webster, H.H., 1984. Helping to create a new future for the Great Lakes: Forest resources in international regional development. In: Lortie, M., ed., Forest resources management - the influence of policy and law, pp. 298-301.
"Forest resources are taking on regional importance beyond anything experienced in decades. Quite deliberate action in public and private sectors will be needed to bring about constructive economic change including a substantial role for forest resources." A joint U.S./Canadian effort is needed. (p.298).

387 Wiersum, K.F., ed., 1984. Strategies and designs for afforestation, reforestation and tree planting. Proceedings of an international symposium on the occasion of 100 years of forestry education and research in the Netherlands, Wageningen, 1983. Wageningen, Pudoc. 432pp.
One of the stated purposes of the symposium was "to provide decision

makers, project people and others connected with forestation with information on the planning and design of successful forestation programmes and projects." (p.2)

388 Wirjodarmodjo, H. and Bratamihardja, M., 1984. Policies, strategies and designs of forest development on the island of Java. In: Wiersum, K.F., ed. Strategies and designs for afforestation, reforestation and tree planting. Wageningen, Pudoc. pp.363-374.

## SOCIAL AND COMMUNAL FORESTRY

389 Arnold, J.E.M., 1984. Forestation for local community development. In: Wiersum, K.F., ed., Strategies and designs for afforestation, reforestation and tree planting. Wageningen,Pudoc. pp. 48-62

390 Basu, N.G., 1984. Community forestry and the local community. In: Wiersum, K.F., ed., Strategies and designs for afforestation, reforestation and tree planting. Wageningen, Pudoc. pp.193-204.
A case study from India is presented.

391 Bohlin, F., 1984. Planning of forestry for rural development. Sveriges Lantbruksuniversitet, U-landsavdelningen, Arbetsrapport 20. 30 pp. + app.
Begins with a discussion of the firewood situation in developing countries. Includes case studies of village afforestation in Tanzania and the Republic of Korea, a case study of the social forestry program of Gujarat and a study of a village afforestation pilot project in Zambia.

392 Burgess, T., 1982. Forestry as a social institution. In: Hallsworth, E.G., ed. Socio-economic effects and constraints in tropical forest management. N.Y., Wiley. pp. 203-208.

393 Ghosh, R.C., 1982. Socio-economic effects and constraints in forest management. In: Hallsworth, E.G., ed., Socio-economic effects and constraints in tropical forest management. N.Y., Wiley. pp. 15-30.

394 Grainger, A., 1984. Activating policies for increasing the effectiveness of forestation projects in the tropics involving non-governmental organizations. In: Wiersum, K.F., ed. Strategies and designs for afforestation, reforestation and tree planting. Wageningen, Pudoc. pp.375-385.
"NGOs play a significant role in the funding and implementation of social forestry projects in developing countries....Steps should...be taken to strengthen the technical capabilities of NGOs in forestry." (p.375)

395 Misra, D.N., 1982. Current management concepts in forestry. In: Hallsworth, E.G., ed. Socio-economic effects and constraints in tropical forest management. N.Y., Wiley. pp. 191-201.

396 National Institute of Rural Development, 1983. Rural social forestry: Papers and proceedings of the national workshop, help at NIRD, Hyderabad, August 5-7, 1982. Hyderabad, India: National Institute of Rural Development. 150 pp.

397 Pelinck, E., Manandhar, P.K. and Gecolea, R.H., 1984. Training and extension for community forestry. In: Wiersum, K.F., ed. Strategies and designs for afforestation, reforestation and tree planting. Wageningen, Pudoc. pp. 331-347.

398 Webb, L.J., 1982. The human face in forest management. In: Hallsworth, E.G., ed. Socio-economic effects and constraints in tropical forest management. N.Y., Wiley. pp. 159-175.

The author argues "that scientific research into forest management and its socio-economic aspects should originate among the local people whose lifestyles and welfare are most affected by the proposed logging operations or other forestry procedures." (p.174).

## AGROFORESTRY

399 Batini, F.E., Anderson, G.W. and Moore, R., 1983. The practice of agroforestry in Australia. In: Hannaway, D.B., ed. Foothills for food and forests, pp. 233-246.

400 Berry, L., 1984. Agroforestry in the West African Sahel. Washington, D.C., National Academy Press, 86 pp.
Report prepared by the Advisory Committee on the Sahel, National Research Council. L. Berry was chairman of the Committee.

401 Boonkird, S.A., Fernandes, E.C.M. and Nair, P.K.R., 1984. Forest villages: An agroforestry approach to rehabilitating forest land degraded by shifting cultivation in Thailand. Agroforestry Systems 2:87-102.
The underlying principle of the forest village scheme "is to relate reforestation with social welfare of the people involved. It is essentially a modification of the traditional taungya method of plantation establishment." (p.87).

402 Briscoe, C.B., 1983. Integrated forestry - agriculture - livestock land use at Jari Florestal e Agropecuaria. In: Huxley, P.A., ed. Plant research and agroforestry. pp. 63-69.

403 Budowski, G., 1983. An attempt to quantify some current agroforestry practices in Costa Rica. In: Huxley, P.A., ed. Plant research and agroforestry. pp. 43-62.

404 Croze, H. and Gwynne, M.D., 1983. The Global Environment Monitoring System: Its value for analysis and development of agroforestry land use systems. In: Huxley, P.A., ed. Plant research and agroforestry. pp.291-295.

405 Gisz, P. and Sar, N.L., 1980. Economic evaluation of an agroforestry project. New South Wales Dept. of Agric., Div. of Marketing and Economics, Misc. Bull. no. 33. 20 pp. + app.

406 Harou, P.A., 1983. Economic principles to appraise agro-forestry projects. Agricultural Administration 12:127-139.
"Basic economic principles and the classical project evaluation techniques can be used to help solve investment decisions for agro-forestry projects." (p.127).

407 Huxley, P.A., ed., 1983. Plant research and agroforestry. Nairobi, International Council for Research in Agroforestry. 617pp.
Proceedings of a Consultative Meeting held in Nairobi, 8-15 April, 1981.

408 Knowles, R.L. and Percival, N.S., 1983. Combinations of Pinus radiata and pastoral agriculture on New Zealand hill country: Forestry productivity and economics. In: Hannaway, D.B., ed. Foothills for food and forests, pp. 203-218.

409 Lundgren, B. and Raintree, J.B., 1983. Sustained agroforestry. In: Agricultural research for development: Potentials and challenges in Asia. The Hague, ISNAR. 26pp.
Describes a "diagnostic and design methodology which...is intended to serve as a reliable tool for arriving at effective agroforestry solutions to local land-use problems the world over." (p.23)

410 MacLean, J.T., 1982. Agroforestry in the Third World: 1970-1982. U.S. National Agricultural Library, Quick Bibliography Series NAL-BIBL.-83-03. 70 citations.
Derived from an on-line search of the AGRICOLA database.

411 MacLean, J.T., 1984. Agroforestry 1982-1984. U.S. National Agricultural Library, Quick Bibliography Series NAL-BIBL, 85-06. 76 citations.
Derived from an on-line search of the AGRICOLA database.

412 Majisu, L., and Labelle, R., 1982. A selected bibliography of agroforestry. Nairobi, International Council for Research in Agroforestry. 60pp.
A selection from among 3000 reprints and 2000 monographs, reports, etc. in the ICRAF library in Nairobi. (p. 1).

413 Morita, M., 1984. Agroforestry in Japan: Yakihata ringyo -- preliminary research on its formative factors and its functions. In: Japanese Forest Economic Society. The current state of Japanese forestry (III), pp. 45-54.

414 Okigbo, B.N., 1983. Plants and agroforestry in land use systems of West Africa. In: Huxley, P.A., ed. Plant research and agroforestry. pp. 25-41.

415 Oldeman, R.A.A., 1983. The design of ecologically sound agroforests. In: Huxley, P.A., ed. Plant research and agroforestry. pp. 173-207

416 Peck, R.B., 1984. Traditional forestation strategies of local farmers in the tropics. In: Wiersum, K.F., ed. Strategies and designs for afforestation, reforestation and tree planting. Wageningen, Pudoc. pp. 205-216.

417 Raintree, J.B., 1983. Bioeconomic considerations in the design of agroforestry cropping systems. In: Huxley, P.A., ed. Plant research and agroforestry. pp. 271-289.

418 Raintree, J.B., 1984. A diagnostic approach to agroforestry design. In: Wiersum, K.F., ed. Strategies and designs for afforestation, reforestation and tree planting. Wageningen, Pudoc. pp. 252-273.

419 Richards, P., 1982. Agroforestry. Commonwealth Agricultureal Bureaux Annotated Bibliography F24. 44 pp.
The references were obtained by searching the CAB database from Jan. 1973 to Feb. 1982.

420 Steppler, H.A. and Raintree, J.B., 1983. The ICRAF research strategy in relation to plant science research in agroforestry. In: Huxley, P.A., ed. Plant research and agroforestry. pp.297-305.

421 Steppler, H.A., 1984. Some policy issues of forestry and agroforestry. In: Lortie, M., ed., Forest resources management - the

influence of policy and law, pp. 318-320.
"Agroforestry, while having its roots in forestry, is essentially incompatible with conventional forest practices." (p.318).

422 Van Nao, T., 1983. Agroforestry systems and some research problems. In: Huxley, P.A., ed. Plant research and agroforestry. pp. 71-77.

## SECTOR ANALYSIS

423 Batten, D.F., 1983. Towards an interdependent system of models for Australian forest sector analysis. In: Seppala, R., C. Row, and A. Morgan, eds., Forest sector models, pp.119-130.

424 Bencze, T., 1984. Optimal satisfaction of timber demand in the Hungarian economy. International Institute for Applied Systems Analysis, Working Paper WP-84-64. 13 pp.

"This article represents part of the detailed analysis of the Hungarian forest sector. In particular, optimal production, consumption, and trade plans for timber have been studied for the entire Hungarian silvicultural sector." (p.iv).

425 Binkley, C.S. and Cardellichio, P.C., 1983. Modeling the hardwood sector: Issues and prospects. In: Seppala, R., C. Row, and A. Morgan, eds., Forest sector models, pp. 71-91.

"This paper discusses some of the considerations important to improving economic models of the hardwood sector." (p.71).

426 Buongiorno, J. and Gilless, J.K., 1983. Concepts used in a regionalized model of pulp and paper production and trade. In: Seppala, R., C. Row, and A. Morgan, eds., Forest sector models, pp. 57-70.

"This paper outlines the structure and underlying concepts of a model of the pulp and paper sector to be used in the 1985 U.S. Forest Service Timber Assessment." (p.57).

427 Ellefson, P.V., 1985. Forestry sector plans: Coordination with nonforestry interests and national plans for development. Paper to be presented to 9th World Forestry Congress, Mexico City, July, 1985. 11pp.

428 Federov, V., Dykstra, D., Iakimets, V. and Kallio, M., 1984. A Soviet module for the Global Forest Sector Model. International Institute for Applied Systems Analysis, Working Paper WP-84-101, 36 pp.

"The purpose of this paper is to suggest how a module representing a centrally planned economy (e.g., the USSR) can be included in the IIASA's Global Trade Model (GTM)." (p.1).

429 Gilless, J.K., 1983. A model of the pulp and paper sector. Ph. D. thesis, University of Wisconsin - Madison. Ann Arbor, University Microfilms International. 119 pp.

"It is anticipated that the model will be used by the U.S....Forest Service for the 1985 Timber Assessment to make long range forecasts, on a regional basis, of the pulp and paper sector's fiber inputs, production levels, productive capacities, and market prices." (p.ii).

430 Grossmann, W.D. and Brunig, E.F., 1983. Concepts of hierarchy in forest sector modeling. In: Seppala, R., C. Row, and A. Morgan, eds., Forest sector models, pp. 105-117.

431 Haynes. R., Adams, D., and Kalbfleisch, D., 1983. Papers from the second North American IIASA Regional Meeting, Nov. 9-10, 1983 Arlington, VA. Washington, D.C., International Institute for Applied Systems Analysis, 230 pp.

"The purpose of the meeting was to discuss... activities of the IIASA Forest Sector Project, Canadian and United States components of the project and complementary research methods." (p.2).

432 International Institute for Applied Systems Analysis, 1983. Structural change in the forest sector: The Forest Sector Project. In: Haynes, R. et al. Papers from the second North American IIASA Regional Meeting, 1983, pp. 4-10.

Describes the Forest Sector Project research plan.

433 Kuuluvainen, J. and Seppala, R., 1983. A policy analysis model for the Finnish forest sector. In: Seppala, R., C. Row, and A. Morgan, eds., Forest sector models, pp. 29-42.

The model, called MESSU, is composed of seven submodels: Forest, forest ownership, harvesting, roundwood market, forest industry, end product market, capital market. (pp.29-30).

434 Nilsson, S., 1983. What we need and what we have in Sweden. In: Seppala, R., C. Row, and A. Morgan, eds. Forest sector models, pp. 43-56.

"This paper explores the present situation in the Swedish forest sector with regard to choices for a strategy in the future." (p.43).

435 Nomura, I., 1982. Forest sector model in Japan and some observations. In: Japanese Forest Economic Society. The current state of Japanese forestry (II), pp. 1-12.

"This paper discusses the structure of the Japanese forest sector for the long terms and some observation about the interesting and important aspects of the forest sector model." (p.1).

436 Pearse, P.H., Nilsson, S., and Williams, D.H., 1983. The Forest Sector Analysis Project: An analytical system for investigating economic and policy issues in Canada's forest sector. In: Haynes, R. et al. Papers from the second North American IIASA Regional Meeting, 1983. pp.219-230.

437 Robinson, V.L. and Fey, W.R., 1983. Use of system dynamics approaches to regional forest sector models. In: Seppala, R. Row, C., and Morgan, A., eds. Forest sector models. pp.93-103.

Land and resource management planning on National Forest System land as prescibed by RPA & NFMA requires a "systematic interdisciplinary approach." (p.93)

438 Seppala, R., Row, C., and Morgan, A., eds., 1983. Forest sector models: Proceedings of the First North American Conference, Williamsburg, 1981. Herts, AB Academic Publ. 354pp.

Reports on the Forest Sector Project of IIASA. "The project is a joint effort of researchers in over 15 nations to cooperatively develop models of their forest sectors that can be linked together to form an international model useful for projecting the development of resources, the progress of industry, and the flows of trade worldwide." (p.v)

439 Seppala, R., 1983. The Forest Sector Project of the International

Institute for Applied Systems Analysis. In: Seppala, R., C. Row, and A. Morgan, eds. Forest sector models, pp.3-6.

The forest sector includes forestry and the forest industry. The Forest Sector Project "includes two interacting tasks: National Forest Sector Analysis; Analysis of World Trade in Forest Products." (p.3-4)

440 Tanganika, G., 1982. Development of the forest sector of the African Timber Organization countries. Regional Meeting for Africa in prep. of the First Consultation on the Wood and Wood Products Industry, Vienna, 1982. United Nations Indus. Dev. Org. ID/WG.373/11. 5pp.

441 Whyte, A.G.D., 1984. Management modelling of the forest sector in New Zealand. In: Nagumo, H. et al., eds. Proc. IUFRO Symp. on Forest Management Planning and Managerial Economics. pp. 25-34.

PROFESSIONAL ACTIVITIES, EDUCATION, EMPLOYMENT OF FORESTERS

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443 Bedel, J., 1983. Note presenting two university post-graduate courses for tropical foresters. In: FAO Advisory Committee on Forestry Education, 12th Session. Report, pp. 68-71.

444 Beuter, J.H., 1985. Commercial timberland: A moving target. Renewable Resources Journal 3(1):5-9.
Summarizes the work of an SAF task force which was "asked to advise the SAF Council on the adequacy of the conventional definition of commercial timberland in the United States and to make recommendations for improving it."(p.5) The definition of commercial timberland "is intended to be descriptive of the timber-use possibilty and not prescriptive of how the land ought to be used."(p.9

445 Blank, G.B., 1983. Writing and the forestry curriculum. Journal of Forestry 81:537-538.
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446 Botero, L.S., 1983. Educational implications of the FAO/ Finland Training Course on Watershed Management for Africa. In: FAO Advisory Committee on Forestry Education 12th Session, Report, pp. 86-89.

447 Burley, J. and Wood, P.J., 1983. Development of curricula for community forestry. In: FAO Advisory Committee on Forestry Education, 12th Session, Report, pp. 62-67.

448 Cooper, A.W., 1984. Increasing the involvement of minorities and women in the renewable resource management professions through education. In: Proc. of the Symposium on Increasing the Involvement of Minorities and Women in Renewable Natural Resources, Greensboro, North Carolina, 1983. Southern Rural Development Center, SRDC Series no. 71. pp.59-67.

449 Deherve, L., 1983. Technical education and vocational training in mechanical wood industries - estimate of annual requirements - guidelines for a development policy for Africa. In: FAO Advisory Committee on Forestry Education, 12th Session. Report. pp. 162-216.

450 FAO Advisory Committee on Forestry Education, 12th Session, Nairobi, Kenya, 1983. Report. Rome, FAO. FO:ACFE-83/Rep. 233 pp.

451 Frykman, B., 1983. Need for forestry teacher training in Africa. In: FAO Advisory Committee on Forestry Education. 12th Session. Report. pp. 141-158.

452 Griffin, D.M., 1983. Attitudes and problems underlying forestry education. In: FAO Advisory Committee on Forestry Education, 12th

Session, Report, pp. 14-16.

453 Harou, P.A., 1984. Teaching forestry economics with field exercises. Journal of Forestry 82:373.

454 Hilmi, H.A., 1983. Needs for training in forestry development planning in Africa. In: FAO Advisory Committee on Forestry Education, 12th Session. Report. pp. 90-103

455 Huxley, P.A. and Zulberti, E., 1983. Report of the ICRAF/DSE International Workshop on Professional Education in Agroforestry. In: FAO Advisory Committee on Forestry Education, 12th Session. Report. pp. 53-61.

456 Jerkedal, A., 1983. Evaluation of the Centre for Forestry Education Development Los Banos, Philippines. In: FAO Advisory Committee on Forestry Education, 12 Session. Report. pp. 124-140.

457 Jingu, R.A. and Child, G.S., 1983. Assesment of trained manpower requirements for wildlife and national parks managment. In: FAO Advisory Committee on Forestry Education, 12th Session, Report, pp. 30-43.

458 Juhola, A., 1983. Finnish support to training for forest industries in Africa. In: FAO Advisory Committee on Forestry Education, 12th Session. Report. pp. 217-223.

459 King, G., 1983. Training and education in arboriculture. In: Trees in the 21st century.
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460 La Bastille, A., 1984. Women and wilderness. San Francisco, Sierra Club Books. 310 pp.

461 Lantican, C.B., 1983. The Centre for Forestry Education Development for the Asia and Southwest Pacific Regions (CFED). In: FAO Advisory Committee on Forestry Education, 12th Session. Report. pp. 119-122.
The CFED is a joint undertaking of the University of the Philippines at Los Banos and the FAO. It was established in 1979.

462 Mergen, F., 1983. Tropical forestry--a challenge to the profession of forestry. New Haven, Yale University School of Forestry and Environmental Studies. 23pp.
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463 Mergen, F., and Lai, C.K., 1982. Professional education in agroforestry in North America. Invited paper, International Workshop on Professional Education in Agroforestry: Planning and Development for Higher-Middle-Level Agroforestry Education, organized by ICRAF, Nairobi, 1982. 36pp.

464 Michaelsen, T., 1983. The start of a forestry training programme in Lesotho. In: FAO Advisory Committee on Forestry Education, 12th Session. Report. pp. 104-110.

465 More, T.A. and Echelberger, H.E., 1984. Recreation education in U.S. forestry schools. In: Lortie, M., ed., Forest resources management - the influence of policy and law, pp. 185-187.

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467 Odera, J.A., 1983. Narrowing the gap between agriculture and forestry education for rural development: The Kenyan context. In: FAO Advisory Committee on Forestry Education, 12th Session, Report, pp. 44-52.

468 Owino, F., 1983. Forestry education and training in Kenya: Issues and perspectives in forestry, forest industries and wildlife management training. In: FAO Advisory Committee on Forestry Education, 12th Session, Report, pp. 17-29.

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470 Sisam, J.W.B., 1982. Forestry and forestry education in a developing country: A Canadian dilemma. Toronto, University of Toronto Press. 167pp.
Published in recognition of the 75th anniversary of the establishment of the University of Toronto, Faculty of Forestry.

471 Stoltenberg, C.H., 1984. The dynamics of education and policy--some implications for foresters. In: Lortie, M., ed., Forest resources management - the influence of policy and law, pp.47-50.
"Maintaining sound forest policies requires a major educational effort by the forestry profession." "Continuous contact between constituent forestry professionals and their legislative representatives has great potential for effective education...." (p.49)

472 Straka, T.J. and Richards, D.P., 1984. Continuing forestry education and technology transfer: Self-perceived and employer-perceived needs of Mississippi foresters. Mississippi Agr. & For. Expt. Station, Info. Bull. 50. 9pp.

473 Trotter, J.A., 1983. Centre for Forestry Education Development for the Asia and Southwest Pacific Regions (CFED)-course planning, management and development. In: FAO Advisory Committee on Forestry Education, 12th Session. Report. 123 pp.

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476 Yavorsky, J.M., 1983. Continuing education needs of professional foresters in selected member countries of FAO. In: FAO Advisory Committee on Forestry Education, 12th Session. Report. pp.159-161.

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479 Bengston, D.N., 1984. Economic impacts of structual particleboard research. Forest Science 30:685-697.
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480 Gregersen, H.M., 1983. University of Minnesota research evaluation program. In: Hyde, W.F., ed. Economic evaluation of investments in forestry research. pp.61-67.
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481 Hyde, W.F., ed., 1983. Economic evaluation of investments in forestry research. Durham, N.C., Acorn Press. 106pp.
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484 Seldon, B.J., 1983. Approaches to investigating the productivity of investments in forestry research. In: Hyde, W.F., ed. Economic evaluation of investments in forestry research. pp.23-52.

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487 Bergsvik, K., 1984. Timber resource information needs in the 1990's. In: Lund, H.G., ed., Preparing for the 21st century, U.S. For. Serv., pp. 32-36.
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488 Blatchford, O.N., 1984. The storage, classification and retrieval of research information. In: Moeller, G.H. and D.T. Seal, eds., Technology transfer in forestry. Great Britain Forestry Commission Bulletin 61:88-91.

489 Callaham, R.Z., 1984. Managing for applications, not just for research and development. Journal of Forestry 82:224-227.
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490 Cubbage, F.W., 1983. Measuring the physical effects of technical advice from service foresters. In: Royer, J.P. and C.D. Risbrudt, eds. Nonindustrial Private Forests... Symp. Proc. pp. 252-258.
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491 Dada, G.O.B., 1984. The Extension and Research Liaison Unit: The new organization machinery for transfer of forestry research results in Nigeria. In: Moeller, G.H. and Seal, D.T., eds. Technology transfer in forestry. Great Britain Forestry Commission Bulletin 61:24-30.

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493 Embree, D.G., 1984. Two contrasting examples of technology transfer in the Maritime Provinces of Canada. In: Moeller, G.H. and Seal, D.T., eds. Technology transfer in forestry. Great Britain Forestry Commission Bulletin 61:38-42.

494 Hilmi, H.A., 1983. Report on the FAO manual on forestry extension. In: FAO Advisory Committee on Forestry Education, 12 Session. Report. pp.81-85.

495 Hilmi, H.A., 1983. Report on the FAO/SIDA Seminar on Forestry Extension, Semarang, Indonesia, 18-30 January 1982. In: FAO Advisory Committee on Forestry Education, 12th Session. Report. pp.72-80.

496 Hobbs, S.D., Gordon, J.C., and Brown, G.W., 1983. Research and technology transfer in southwest Oregon. Journal of Forestry 81:534-536.

497 Holmes, G.D., 1984. Applying the results of forest research in Britain. In: Moeller, G.H. and Seal, D.T., eds. Technology transfer in forestry. Gt. Britain Forestry Commission Bulletin 61:2-6.

498 Hummel, F.C. 1984. Forestry research and its application in continental Western Europe. In: Moeller, G.H. and Seal, D.T., eds. Technology transfer in forestry. Gt. Britain Forestry Commission Bulletin 61:10-15.

499 Irland, L.C., Rumpf, T. and Dirkman, J., 1984. The market for forestry services and landowner programs in New England. In: Irland, L.C., ed., Improving the effectiveness of public programs for private forest owners. Univ. of Maine, College of Forest Resources, Tech. Note no. 91, pp. 18-41.

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501 Krygier, J.T. and Deneke, F.J., 1983. Cooperative Extension Service programs for the education of forest landowners. In: Royer, J.P. and C.D. Risbrudt, eds., Nonindustrial private forests... Symp. Proc., pp. 259-267.

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504 McKnight, T.S. and Mathur, V.N.P., 1984. Transfer of forest products technology. In: Moeller, G.H. and Seal, D.T., eds. Technology transfer in forestry. Gt. Britain Forestry Commission Bulletin 61:53-56.

505 Mlinsek, D., 1984. Development and technology transfer in forestry. In: Lortie, M., ed. Forest resources management--the influence of policy and law. pp.55-58.

506 Moeller, G.H. and Seal, D.T., eds., 1984. Technology transfer in forestry: Proceedings of a meeting of I.U.F.R.O. Subject Group S6.08, 'Applying the Results of Forestry Research,' held at Edinburgh Univ., 1983. Gt. Britain Forestry Commission Bulletin no. 61. 113pp.

507 Motyka, C.M., 1984. Looking for business: Results of an intensive pilot project in Vermont. In: Irland, L.C., ed. Improving the effectiveness of public programs for private forest owners. Univ. of Maine, College of For. Res., Tech. Note 91. pp.8-11.

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508 Neustein, S.A. and Seal, D.T., 1984. Technology transfer: Lessons of the British experience. In: Moeller, G.H. and Seal, D.T., eds. Technology transfer in forestry. Gt. Britain Forestry Commission Bulletin 61:97-100.

509 Northeast Petroleum Forest Resources Cooperative, 1984. Northeast Petroleum - Forest Resources Cooperative Symposium, 1st, Salamanca, N.Y., Proceedings. Syracuse, State Univ. of New York, College of Environ. Science and Forestry. unpaged.

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510 Shepherd, K.R. and Griffin, D.M., 1984. The Nepal-Australia Forestry Project: A case study of research and development. In: Moeller, G.H. and Seal, D.T., eds. Technology transfer in forestry. Gt. Britain Forestry Commission Bulletin 61:16-23.

511 Sizemore, W.R., 1983. Service roles of the forestry community: Consulting foresters. In: McCarthy, J.A., Forest land investment. pp.137-141.

512 Stratton, K.G., 1983. Service roles of the forestry community: Public agencies. In: McCarthy, J.A., Forest land investment, pp. 131-133.

The author states that "the first and very basic role, especially for the state forestry agencies, is leadership." (p.131).

513 Stratton, K.G., 1984. Changing program emphasis in a time of budget cuts. In: Irland, L.C., ed., Improving the effectiveness of public programs for private forest owners. Univ. of Maine, College of For. Res., Tech. Note no. 91, pp. 12-14.

"With reduced budgets and staffing, an emphasis on education is the best option we have to continue to deliver a message for good forest management." (p.14).

514 Wallender, H.W. III, 1984. Technology transfer in the forest industries. In: Laarman, J.G. and Dutrow, G.F., comp. Private enterprise initiatives for international forestry development. U.S. For. Serv., Gen. Tech. Rep. WO-40. pp.32-40.

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515 Watson, J.H., 1983. Service roles of the forestry community: State forestry associations - southeast. In: McCarthy, J.A., ed., Forest land investment, pp. 134-136

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516 Webb, C.D., 1984. Legislation within the United States affecting research, development, and technology transfer. In: Lortie, M., ed., Forest resour[illegible] management - the influence of policy and law, pp. 59-62.

517 Wiedemann, C.P., 1984. Charging landowners for public forestry services: The New York experience. In: Irland, L.C., ed. Improving the effectiveness of public programs for private forest owners. University of Maine, College of For. Res., Tech. Note 91. pp.3-7.

Fees for forestry services have been charged in New York since 1977. The author states that these charges have improved the effectiveness of public forestry programs.

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518 Ahlgren, C.E. and Ahlgren, I.F., 1983. The human impact on northern forest ecosystems. In: Flader, S.L., ed. The Great Lakes Forest; an environmental and social history. Minneapolis, University of Minnesota Press. pp 33-51.

519 Bobier, M.J., 1984. How expanded scoping can make environmental analysis more socially relevant. In: Nagumo, H. et al., eds., Proc, IUFRO Symp. on Forest Management Planning and Managerial Economics. pp. 459-466.

The Council on Environmental Quality issued, in 1978, Regulations for Implementing the Procedural Provisons of the National Policy Act... Section 1501.7 Scoping of the regulations called for 'an early and open process for determining the scope of issues to be addressed...." (p.459-60).

520 Bowonder, B., 1983. Forest depletion: Some policy options. Resources Policy 9:206-224.

521 Caulfield, C., 1985. In the rainforest. New York, A.A. Knopf. 304 pp.

522 Clarke, T.C., 1984. A philosophical look at some natural resource and environmental problems. In: Lortie, M., ed., Forest resources management - the influence of policy and law, pp. 308-312.

"Ecology and economics still need to be reconciled at all levels from the most theoretical to the most practical." (p.312).

523 Daneke, [illegible] A., Garcia, M.W., and Delli Priscoli, J., eds., 1983. Public involvement and social impact assessment. Boulder, Colorado, Westview Press. 303 pp.

A collection of articles written in conjunction with a research conference jointly sponsored by the U.S. Army Corps of Engineers and the U.S. Dept. of the Interior, Office of Research and Technology.

524 Devall, B. and Sessions, G., 1984. The development of natural resources and the integrity of nature. Environmental Ethics 6:293-322.

The authors "explore a contemporary version of Muir°s 'righteous managment' by developing the ideas of holistic management and ecosystem rehabilitation." (p.293).

525 Fairfax, S. and Burton, L., 1984. A decade of NEPA: Milestone or millstone ? Renewable Resources Journal 2(5):22-27.

Focuses "on NEPA as one manifestation of a fairly standard approach to reforming outcomes in public administration: Altering the procedure by which decisions are made." (p.22).

526 Gilbert, F.F., 1982. Environmental implications and effects of departure on other forest resouces, including aesthetics. In:LeMaster,

D.C. et al., eds., Sustained yield, pp. 77-81.

527 Goodland, R., 1984. The World Bank, environment, and protected areas. In: McNeely, J.A. and Miller, K.R., eds. National parks, conservation, and development. pp.698-705.
"Environmental criteria...are systematically integrated into World Bank projects in the belief that sustainable economic development depends on sound environmental management." (p.698)

528 Gregor, H.D., 1984. Effects of the atmospheric impacts on forest ecosystems. Allgemeine Forstzeitschrift, 39:1279-1282.
(In German). In a popular-scientific article are shown the interactions between atmospheric impacts and forests, the toxicity of air-pollutants and their effects on tree growth, the possible consequences of pollution for the whole ecosystem and the urgent need of research to clear up the creeping decline of forests. (WK)

529 Haug, P.T., 1983. Resource inventories and monitoring under NEPA: Applying scientific method. In: Bell, J.F. and Atterbury, T., eds. Renewable resource inventories for monitoring changes and trends. pp.261-265.

530 Kirby, P.C., 1984. Natural diversity requirements in environmental legislation affecting national forest planning (except the National Forest Management Act). In: Cooley, J.L. and J.H. Cooley, eds., Natural Diversity in Forest Ecosystems, Proc. of the Workshop, Athens Georgia, 1982, pp. 11-20.
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531 Lahde, E., 1984. The future of the world's woods and forests. Paper for the Club of Rome Helsinki Conference, July, 1984. 5pp.
The author believes that the future of the world's forests is "catastrophic." p.1.

532 Larsen, J., 1983. Environmental issues and their influence on world trade in wood. In: Bethel, J.S., ed., World trade in forest products, pp. 129-136.
The author states that "a crucial element in determining the overall productive efficiency of the U.S. wood products industry involves the costs and constraints placed on production by the current methods for regulating and enforcing environmental standards." (p.129).

533 Moosmayer, H.U., 1984. Perceptions about the forest decline. Forstwissenschaftliches Centralblatt 103:1-16.
(In German; English summary). Through systematical inventories on permanent observaton areas, important groups of animal and plant pests could be eliminated as primary for the fir decline. Analyses of annual rings on firs showed significant reduction of increment, frequently beginning about 1960, on presently sick trees when compared with healthy ones. (WK)

534 Myers, N., 1984. Forests and environment. Paper for Club of Rome Helsinki Conference. July, 1984. 26pp.

In temperate zone forests, environmental factors such as acid rain are damaging the forests: in the tropics depletion of forest cover leads to environmental degradation. (p.1)

535 Potter, H.R. and Norville, H.J., 1983. Citizens' participation and effectiveness in environmental issues. In: Daneke, G.A. et al., eds. Public involvement and social impact assessment. Boulder, Colorado, Westview Press. pp.35-44.

536 Rageth, B., 1984. Effects of the forest decline to their functions and their exploitation - consequences for the forest policy. Schweizerische Zeitschrift fur Forstwesen 135:927-935.
(In German; French summary). In the mountain regions of Switzerland the protective functions of the forest have priority. Without them whole valleys in the Alps and in the Jura would be uninhabitable. The principle that rules the forest policy in Switzerland is the conservation of the forests. (WK)

537 Salleh, M.N., 1984. The future of tropical forests of South Asia. In: Lortie, M., ed., Forest resources management - the influence of policy and law, pp. 111-120.
"For what is left of natural forests, (of South Asia) the need for conservation will increase and it may not be too long before conservation needs will dominate over other uses of forests." "In extreme cases. there will be simply no more forests left." (p.111).

538 Schopfer, W. and Hradetzky, J., 1984. Circumstantial evidence: Air pollution is the determinative factor causing the forest decline. Forstwissenschaftliches Centralblatt 103:231-248. (In German; English summary). By gaining a wide data spectrum for causal research, covering the most important stocking and site criteria,
a 4 x 4 - km sampling grid had been chosen, yielding an over proportionally high number of 1169 plot means. The most important result of this intensive analysis is that it has been proven through complementary circumstantial evidence that air pollution is the determinative factor causing the forest decline. (WK)

539 Tucker, W., 1982. Progress and privilege: America in the age of environmentalism. Garden City, N.Y., Anchor Press/Doubleday. 314 pp.

540 Westoby, J.C., 1983. Saving the tropical forests: Some facts which have to be faced. Australian Forestry 46:241-250.
Keynote address, 10th Triennial Conf., Institute of Foresters of Australia.

## SOCIAL SCIENCES APPLIED TO FOREST MANAGEMENT

### GENERAL

541 Alves, J., Mendes, J.L., D'Oliveira, J.A.L., and Dias, A.J.B., 1983. Methodes d'amenagement des forets en Portugal. In: Carcea. F., coord. Forest management in various countries of the world. Bucharest, IUFRO. pp. 173-178.

542 Anstey, C., Thompson, S., and Nichols, K., 1982. Creative forestry: A guideline for forest managers. Wellington, New Zealand Forest Service. 117 pp.
The stated purpose of the book is "to help forest managers understand and assess landscape values and relate them to forestry." (tp).

543 Apsey, T.M., 1983. Toward a forest management strategy for British Columbia. In: Sadler, B., ed., Canada's forests: Transition to management, pp. 59-66.

544 Barlow, T.J., 1984. Some historical trends in timber management. In: Johnston, G.M. and Emerson, P.M., eds. Public lands and the U.S. economy. pp.183-186.

545 Biles, L.E., 1984. The impact of land tenure on southern forest management practices. In: Lortie, M. ed., Forest resources management - the influence of policy and law, pp. 313-315.
"Of the principal tenure types (industrial, private, federal public and nonindustrial private) industrial private is regarded as the most significant.".(in the south) (p.313).

546 Boudru, M. and Roisin, P., 1983. Methodes d'amenagement des forets en Belgique. In: Carcea, F., coord. Forest management in various countries of the world. Bucharest, IUFRO. pp. 25-38.

547 Budowski, G., 1982. The socio-economic effects of forest management on the lives of people living in the area: The case of Central America and some Caribbean countries. In: Hallsworth, E.G., ed. Socio-economic effects and constraints in tropical forest management. N.Y., Wiley. pp. 87-102.

548 Carcea, F., 1984. Amenagement des forets en conception systematique. In: Nagumo, H., et al., eds., Proc. IUFRO Symp. on Forest Management Planning and Managerial Economics. pp. 263-269.
"The paper presents the Romanian conception on the structural management of the forests by means of management plans." (p.263).

549 Carcea, F., coord., 1983. Forest management in various countries of the world. Bucharest, International Union of Forestry Research Org. S.4.04 Forest Management Planning and Managerial Economics. 360 pp.
Includes papers on the current state of forest management in 31 countries. Articles are in English, French, or German.

550 Castellani, C., 1983. Donnees sur l'amenagement forestier actuel en Italie. In: Carcea, F., coord., Forest management in various countries

of the world. Bucharest, IUFRO. pp. 137-146.

551 Cole, L.A., 1982. Forest resource management: Meeting the challange in the states. Lexington, KY, Council of State Governments. 115 pp.
"In many cases state forestry programs while well managed, have been isolated from other activities of state government and the private sector... In the next decade existing and new state forest resource programs...will be assessed for their contribution to broader economic and social goals of the state." (pp.xiii-ix).

552 de Camino, R., 1983. The actual situation of forest management in Venezuela. In: Carcea, F., coord., Forest management in various countries of the world. Bucharest, IUFRO. pp. 303-316.

553 Diaz, C.P., 1982. Socio-economic thrusts in an integrated forest management system: The Philippine case. In: Hallsworth, E.G., ed., Socio-economic effects and constraints in tropical forest management. N.Y., Wiley. pp. 107-122.

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"There are almost no natural forests under management in Tropical America." "Nonetheless there exists in almost every tropical country forest legislation aimed at providing long term forest management of natural forests." (p.121)

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Intended as a general introduction to the subject--primarily for nonprofessionals. (preface)

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562 Jonsson, B. and Jacobsson, J., 1983. Forest management in Sweden. In: Carcea, F., coord., Forest management in various countries of the world. Bucharest, IUFRO. pp. 205-211

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564 Koyo, I.P., 1983. Donnees sur l'amenagement forestier en Republique Populaire du Congo. In: Carcea, F., coord., Forest management in various countries of the world. Bucharest, IUFRO. pp. 317-320.

565 Kristanov, K. and Beljakov, P., 1983. Angaben uber die derzeitige Forsteinrichtung der VR. Bulgarien. In: Carcea, F., coord., Forest management in various countries of the world, Bucharest, IUFRO. pp. 39-52.

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568 Lewis, B. J., 1983. Public organization in Minnesota: Information resources for forest management. Minnesota Forestry Research Notes no. 285. 4pp.

569 Lortie, M., [editor], 1984. Forest resource management - the influence of policy and law. Speeches and papers presented at International Forest Congress, Quebec, 1984. 434 pp.
The Canadian Institute of Forestry, the Society of American Foresters, the Ordre des ingenieures forestiers du Quebec and the International Union of Societies of Foresters met in Quebec in August, 1984 to hold an International Forest Congress.

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571 Lusigi, W.J., 1982. Socio-economic effects and constraints in forest management in Kenya. In: Hallsworth, E.G., ed. Socio-economic effects and constraints in tropical forest management. N.Y., Wiley. pp.123-130.

572 Marschall, J., 1983. Die derzeitige Forsteinrichtung in Osterreich. In: Carcea, F., coord., Forest management in various countries of the world. Bucharest, IUFRO. pp.9-24.

573 Martinot-Lagarde, P., 1983. Methodes d'amenagement des forets en France. In: Carcea,F., coord., Forest management in various countries of the world. Bucharest, IUFRO. pp.69-80.

574 Mgeni, A.S.M., 1983. Forest management in Tanzania. In: Carcea, F., coord. Forest management in various countries of the world, Bucharest,

IUFRO. pp. 333-344.

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world. Bucharest, IUFRO. pp.275-287.

588 Smykala, J., 1983. Angaben uber die derzeitige Forsteinrichtung der Volksrepublik Polen. In: Carcea, F., coord. Forest management in various countries of the world, Bucharest, IUFRO. pp. 161-172.

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591 Spears, J.S., 1984. Role of forestation as a sustainable land use and strategy option for tropical forest management and conservation and as a source of supply for developing country wood needs. In: Wiersum, K.F., ed. Strategies and designs for afforestation, reforestation and tree planting. Wageningen, Pudoc. pp. 29-47.

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## MULTIPLE-USE MANAGEMENT

593 Allen, W.R., 1984. Managing timberlands for the community's benefit. In: Gamache, A.E., ed., Selling the federal forests, University of Washington, College of Forest Resources, Inst. of For. Res., Contribution no. 50, pp. 63-75.

594 Campbell, G.E., 1981. Conceptual and empirical multiproduct production models in forestry: A survey. In: Gundermann, E. and H.F. Kaiser, Comp., Research today for tomorrow's forests, pp. 29-45.
"Empirical studies of multiproduct relationships on forestland need to be increased if estimation of economic trade-offs are to be improved." (p.39).

595 Carvell, K.L., 1983. Proper forest management practices can protect and enhance wildlife, water, and recreation values. In: Dempsey, G.P. and K.S. Price, eds., Governor's Conference on West Virginia's Forest Industry, pp. 164-169.

596 Cooley, J.L. and Cooley, J.H., eds., 1984. Natural diversity in forest ecosystems: Proceedings of the Workshop, Athens, Georgia, 1982. University of Georgia, Institute of Ecology. 290pp.
"With the advent of the National Forest Management Act (NFMA) of 1976, natural diversity emerged as a requirement...of good forest resource management." The purpose of this Workshop was to "identify the current state of information and the future needs to implement the NFMA provisions for diversity on national forests." (p.1).

597 Evans, J., 1984. Management for non-wood values. In: Silviculture of broadleaved woodland. Great Britain Forestry Commission Bulletin 62:127-152.
Includes chapters on "Landscape and recreation", "Conservaton", "Sporting", and "Urban woods."

598 Falk, B. and Mortnas, A., 1984. Multiple use in Swedish forest policy. In: Saastamoinen, O. et al., eds. Multiple - Use Forestry in the Scandinavian Countries, Symp., 1982, Proc. Communicationes Instituti Forestalis Fenniae 120:19-22.

599 Heden, E., 1984. Multiple-use forestry practised by the Swedish Forest Service. In: Saastamoinen, O. et al., eds. Multiple-use Forestry in the Scandinavian Countries, Symp., 1982, Proc. Communicationes Instituti Forestalis Fenniae 120:23-26.

600 Hultman, S.-G., 1984. Multiple-use forestry in Sweden: Undefined--and non-existent? In: Saastamoinen, O.,et al., eds. Multiple-Use Forestry in the Scandinavian Countries, Symp., 1982, Proc. Communicationes Instituti Forestalis Fenniae 120:27-32.
The author concludes that the concept of multiple use "is well established in theory and in practice in the USA... In Sweden, however, it has not even been defined, much less applied." (p.27)

601 Koch, N.E., 1984. Multiple-use forestry: Danish statistics. In: Saastamoinen, O., et al., eds., Multiple-Use Forestry in the Scandinavian Countries, Symp., 1982, Proc. Communicationes Instituti Forestalis Fenniae 120:33-38.

602 Kohler, V., 1981. Evaluation techniques for multiple use forestry in western Europe. In: Gundermann, E. and H.F. Kaiser, comp., Research today for tomorrow's forests, pp. 127-134.

603 Loucks, O.L., 1984. Natural diversity as a scientific concept in resource management. In: Cooly, J.L. and Cooley, J.H., eds. Natural Diversity in Forest Ecosystems. pp. 1-10.

604 MacCleery, D., 1984. Diversity, multiple use, the NFMA, and the land ethic. In: Cooley, J.L. and Cooley, J.H., eds. Natural Diversity in Forest Ecosystems. pp. 27-30.
"Much more research is needed to determine an adequate measure of diversity and its value." "The National Forest Management Act suggests that diversity be considered more as a result of planned forest management than as an objective of forest planning." (p.27).

605 Mattsson, L., 1984. Forestry and reindeer husbandry in Sweden: Some aspects on the development of a double land-use. In: Saastamoinen, O., et al., eds., Multiple-use Forestry in the Scandinavian Countries, Symp., 1982, Proc. Communicationes Instituti Forestalis Fenniae 120:89-96.
Reindeer husbandry and forestry share in common about 1/4 of the land area in Sweden.(p.89) The relationship has been the cause of some conflict.(p.89)

606 Meeks, G.,Jr., 1982. A legislator's guide to forest resource management. Denver, National Conference of State Legislatures, 98pp.
"This guide represents an effort to present complex forest management concepts and issues in a simple format." (p.v) Includes an appendix on major federal legislation.

607 Merriam, L.C., 1984. Land use for timber and recreation: A case study in Victoria, Australia. Minnesota Academy of Science Journal, 49(3):19-21, 1983/84.
The author compares the conflict in land use--timber harvest versus recreation--in the Boundary Waters Canoe Area in Minnesota with that in Australia.

608 Opheim, T., 1984. Notes on the Oslomarka. In: Saastamoinen, O., et al., eds. Multiple - Use Forestry in the Scandinavian Countries, Symp., 1982, Proc. Communicationes Instituti Forestalis Fenniae 120:39-43.
"The paper gives a brief outline of some land use problems and management questions connected with the forest area in Oslo and surrounding municipalities." (p.39).

609 Papanek, F., 1981. Function-integrated forest management. In: Gundermann, E. and Kaiser, H.F., comp. Research today for tomorrow's forests. pp.135-142.
"All forest functions--or...all objectives of forest management--may be grouped into three basic forest functions...the productive function,

the ecological function and the environmental function." (p.135)

610 Papanek, F., 1983. Planning forest resources for wood and non-wood benefits in a changing world. In: Bell, J.F. and T. Atterbury, eds. Renewable resource inventories for monitoring changes and trends, pp. 52-54.
Describes a study done in Czechoslovakia on "how to adapt working plans of forests to present ecologic and environmental demand." (p.52).

611 Papanek, F., 1984. Forest management with regard to functional forest types. In: Nagumo, H. et al., eds. Proc. IUFRO Symp. on Forest Management Planning and Managerial Economics. pp. 207-216.
"Each benefit to be derived from the forest requires specific methods of management." (p.207).

612 Pearson, H.A., 1982. Economic analysis of pine forest grazing. In: Clason, T., ed. Multiple use land management for nonindustrial pine forest landowners. pp. 77-88.
"The purpose of this paper is to provide information regarding costs and returns from multiple management of timber and livestock." (p.77).

613 Peterson, R.M., 1984. Diversity requirements in the National Forest Management Act. In: Cooley, J.L. and Cooley, J.H., eds. Natural Diversity in Forest Ecosystems. pp. 21-26.
The National Forest Management Act requires "that natural diversity must be provided through land management planning on the national forests." (p.21).

614 Reunla, A., 1984. Forest as symbolic envirnoment. In: Saastamoinin, O., et al., eds. Multiple-use Forestry in the Scandinavian Countries, Symp., 1982, Proc., Communicationes Instituti Forestalis Fenniae 120:81-85
"Environmental symbolism means that familiar forests are valuable to us because they reflect memories of our past life experiances." (p.81).

615 Saastamoinen, O., Hultman, S.-G., Koch, N.E., and Mattsson, L., eds., 1984. Multiple-Use Forestry in the Scandinavian Coutries: Proceedings of the Scandinavian symposium held in Rovaniemi and Saariselka, Finland, Sept. 13-17, 1982. Communicationes Instituti Forestalis Fenniae no. 120. 142pp.
Among the papers included are several on the concepts of multiple-use forestry, forest recreation and amenity values, and planning for multiple-use forestry.

616 Saastamoinen, O., Hultman, S.-G., and Mattsson, L., 1984. Multiple use of forests in the Scandinavian countries: An introduction. In: Saastamoinen, O. et al., eds. Multiple-Use Forestry in the Scandinavian Countries, Symp., 1982, Proc. Communicationes Instituti Forestalis Fenniae 120:7-13.

617 Saastamoinen, O., 1984. Product transformation in multiple-use forestry. In: Saastamoinen, O. et al., eds. Multiple-Use Forestry in the Scandinavian Countries, Symp., 1982, Proc. Communicationes Instituti Forestalis Fenniae 120:119-125.
"Product transformation or...product substitution tells the degree of inter-changeability of trading between the uses (products) of forestry land" (p.119)

618 Salwasser, H., Thomas, J.W. and Samson, F., 1984. Applying the diversity concept to national forest management. In: Cooley, J.L. and Cooley, J.H., eds. Natural Diversity in Forest Ecosystems. pp. 59-69.

"Diversity in national forest management ... encompasses attention on the effects of decisions at all levels, from national and regional land allocations and resource goals to specific objectives of a stand management prescription." (p.59).

619 Sedjo, R.A., ed., 1983. Governmantal interventions, social needs, and the management of U.S. forests. Washington, D.C., Resources for the Future. 300pp.

The "overriding concern" of the conference on which this volume is based, "involves the management of forest lands, both private and public, in a manner that would maximize the net contribution of forests to societal welfare." (p.xi)

620 Skarback, E., 1984. Planning tools for multiple-use forestry. In: Saastamoinen, O. et al., eds. Multiple-Use Forestry in the Scandinavian Countries, Symp., 1982, Proc. Communicationes Instituti Forestalis Fenniae 120:126-130.

"Presents some common planning tools which are used in Sweden to facilitate recreational land use within multiple-use forestry." (p.126)

621 Stridsberg, E., 1984. Multiple - use forestry in former days In: Saastamoinen, O., et al., eds. Multiple-use Forestry in the Scandinavian Countries, Symp. 1982, Proc. Communicationes Instituti Forestalis Fenniae 120:14-18.

622 Suzuki, F., 1984. The public use of the prefectural forest and its future. In: Nagumo, H. et al., eds. Proc. IUFRO Symp. on Forest Management Planning and Managerial Economics. pp. 153-156.

623 Toothman, D.N., 1983. How industry looks at multiple-use planning. In: Dempsey, G.P. and K.S. Price, eds. Governor's Conference on West Virginia's Forest Industry. pp. 148-151.

624 Veijola, P., 1984. Multiple-use planning in the Finnish school forests. In: Saastamoinen, O. et al., eds. Multiple-Use Forestry in the Scandinavian Countries, Symp., 1982, Proc. Communicationes Instituti Forestalis Fenniae 120:136-139.

"Presents an example of multiple-use planning in commercial forests." (p.136)

## OWNERSHIP

### GENERAL

625 Bjork, G.C., 1984. Ownership and outcome: An economic analysis of the privatization of land tenure on forest and rangeland. In: Brubaker, S., ed., Rethinking the federal lands, pp. 181-192.

626 Bromley, D.W., 1984. Public and private interest in the federal lands: Toward conciliation. In: Johnston, G.M. and P.M. Emerson, eds. Public lands and the U.S. economy, pp. 3-18.

627 Brubaker, S., 1984. Access and distributional impacts of public and private land ownership. In: Johnston, G.M. and P.M. Emerson, eds. Public lands and the U.S. economy, pp. 25-28.

628 Dyer, A.A. and Frayer, E.W., 1985. Regional changes in U.S. commercial forest land. In: Sedjo, R.A., ed. Investments in forestry. pp. 121-148.
"In discussing the extent of conversions of commercial forest land (CFL) in the United States in recent years, this chapter decribes regional changes that occurred between 1962 and 1977 in the CFL base in the forty-eight contiguous states." (p.121.)

629 Fellows, E.S., 1984. Land tenure and its impact on forest management. In: Lortie, M., ed. Forest resources management--the influence of policy and law. pp.227-231.
"Both private and public ownership (tenure) can be a disincentive to forest management." (p.231)

630 Johnson, K., 1984. Land tenure and its impact on forest management in the Western United States. In: Lortie, M., ed., Forest resources management - the influence of policy and law, pp. 232-235.

631 Pejovich, S., 1984. Origins and consequences of alternative property rights. In: Gamache, A.E., ed., Selling the federal forests. pp. 163-175.
"The purpose of this paper is to examine the effects of five different property rights structures on the use of earning assets." (p.163).

632 Solomon, K.I., 1982. Control and protection of forest assets: Land. In: Sizemore, W.R., ed. Accounting for the money that grows on and is spent on trees. pp. 20-26.

633 Stroup, R.L., Baden, J.A. and Fractor, D.T., 1983. Natural resources: Bureaucratic myths and environmental management. San Francisco, Pacific Institute for Public Policy Research; Cambridge, Ballinger Pub. Co. 148 pp.
"As its central theme, the book argues that the management of natural resources is primarily affected by the structure of the property rights of the effective manager (public or private)." (p.xiii).

634 Vaux, H,J., 1982. The application of sustained yield to areas of mixed ownership. In: LeMaster, D.C. et al., eds. Sustained yield. pp.53-60.
"This paper examines several approaches to the application of a

policy of sustained yield to areas of mixed public and private ownership." (p.53)

635 Willaims, F.E., 1982. Timber ownership in Louisiana. Louisiana Rural Economist 44(4):8-11.

PUBLIC

636 Baden, J., 1983. Privatizing wilderness lands: The political economy of harmony and good will. In: Truluck, P.N., ed. Private rights and public lands, pp. 53-70.
Privatization has ecological, economic, and equity advantages over continued public ownership of wilderness lands...." (p.70).

637 Baughman, M.J. and Ellefson, P.V., 1984. Minnesota county forests: Land ownership policies. Minnesota Forestry Research Notes no. 289, 4 pp.
"County governments in northeastern Minnesota manage nearly 2.8 million acres of tax-forfeited land..." (p.1).

638 Brubaker, S., 1984. Issues and summary of federal land tenure. In: Brubaker, S., ed., Rethinking the federal lands, pp. 1-31.
"The federal government is by far the largest landowner in the United States.... Controversies over federal lands abound, but... management issues have dominated public discussion to the exclusion of basic questions of tenure." (p.1).

639 Brubaker, S., ed., 1984. Rethinking the federal lands. Washington, D.C., Resources for the Future, Inc. 306 pp.
"Most of the papers in this volume grew out of an RFF conference on the subject of tenure arrangements on the federal lands." (p.xi).

640 Clawson, M., 1983. The federal lands revisited. Washington, D.C., Resources for the Future. 302pp.

641 Clawson, M., 1983. Reassessing public lands policy. In: Truluck, P.N., ed. Private rights and public lands. pp.17-28.

642 Clawson, M., 1984. Major alternatives for future management on the federal lands. In: Brubaker, S., ed. Rethinking the federal lands. pp.195-234.

643 Cockerham, M.N., 1982. An assessment of citizen participation in public land management. Mimeo 20 pp.

644 Cutler, M.R., 1984. National forests best meet the needs of the American people. In: Gamache, A.E., ed. Selling the federal forests. University of Washington, College of Forest Resources, Inst. of For. Res., Contribution no.50. pp.195-211.

645 Cutler, M.R., 1984. The Wilderness Society isn't broken and doesn't need fixing. In: Johnston, G.M. and Emerson, P.M., eds. Public lands and the U.S. economy. pp.77-80.
Disagrees with Baden and Lueck that "only through private ownership will land and resources be conserved for future generations...." (p.77)

646 Dowdle, B., 1983. The case for privatizing government owned timberlands. In: Truluck, P.N., ed., Private rights and public lands,

pp. 71-83.

The purpose of this paper "is to argue the case for privatizing commercial timberlands that are owned and managed by government: Federal, state or local. The principal use of these lands is commercial timber production, an activity that is best conducted by the private sector." (p.71).

647 Dowdle, B., 1984. The case for selling federal timberlands. In: Gamache, A.E., ed. Selling the federal forests. pp. 21-46.

648 Dowdle, B., 1984. Why have we retained the federal lands? An alternative hypothesis. In: Brubaker, S., ed. Rethinking the federal lands, pp. 61-73.

Presents an alternative view to that of Paul Gates in the same volume.

649 Fairfax, S.K., 1984. Beyond the Sagebrush Rebellion: The BLM as neighbor and manager in the western states. In: Francis, J.G. and R. Ganzel, eds., Western public lands, pp. 79-91.

650 Francis, J.G. and Ganzel, R., editors, 1984. Western public lands: The management of natural resouces in a time of declining federalism. Totowa, NJ, Rowman & Allanheld Publ. 312 pp.

651 Francis, J.G., 1984. Environmental values, intergovernmental politics, and the Sagebrush Rebellion. In: Francis, J.G. and R. Ganzel, eds. Western public lands, pp. 29-46.

652 Francis, J.G., 1984. Realizing public purposes without public ownership: A strategy for reducing intergovernmental conflict in public land regulation. In: Francis, J.G. and R. Ganzel, eds. Western public lands, pp. 149-169.

653 Gallagher, T.E., 1984. Federal - state cooperation and public land policy. In: Johnston, G.M. and P.M. Emerson, eds. Public lands and the U.S. economy, pp. 105-113.

654 Gamache, A.E., ed., 1984. Selling the federal forests. University of Washington, College of Forest Resources, Contribution no. 50. 273pp.

Proceedings of a symposium on privatization held at the University of Washington in April, 1983. The basic issue addressed was "the sale of extensive areas of federally owned, commodity producing lands to the private sector." (p.v)

655 Ganzel, R., 1984. Maximizing public land resource values. In: Francis, J.G. and R. Ganzel, eds. Western public lands, pp. 129-148.

656 Gardner, B.D., 1984. The case for divestiture. In: Brubaker, S., ed. Rethinking the federal lands, pp.156-180.

"Most of the inefficiencies inherent in political allocations would be overcome if public ownership and management were replaced by the private sector." (p.178)

657 Gates, P.W., 1984. The federal lands: Why we retained them. In: Brubaker, S., ed., Rethinking the federal lands, pp. 35-60.

"Conservation, environmentalism, and ecology all argue that whatever the faults of government management of the national forest lands, the

national parks, and monuments, and the bulk of the BLM rangelands, such management is less corrosive of nature and the well-being of man than private ownership has been shown to be elsewhere." (p.55).

658 Hagenstein, P.R., 1984. The federal lands today: Uses and limits. In: Brubaker, S., ed., Rethinking the federal lands, pp. 74-107.
The author's purpose "is to describe briefly the present extent and uses of the federal lands and to comment on some matters that are important to their current and prospective status and use." It is not the author's intent "to make a case for or against continued federal ownership." (p.74).

659 Hanke, S.H., 1983. On privatizing the public domain. In: Truluck, P.N., ed., Private rights and public lands, pp. 85-88.
"Privatization in all its forms... not only is the correct course in principle, but is also practical and beneficial." (p.88).

660 Hanke, S.H., 1984. On privatization. In: Gamache, A.E., ed., Selling the federal forests. University of Washington, College of Forest Resources, Contribution no. 50, pp. 84-92.

661 Harvey, D,M., 1984. Public land politics in the 1980s. In: Johnston, G.M. and Emerson, P.M., eds. Public lands and the U.S. economy. pp.81-103.
"Federal land issues are a complex web, but using the policies and processes of existing laws can help achieve a broadly balanced program." (p.81)

662 Harvey, D.M., 1984. Uses and limits of the federal lands today: Who cares and how should current law work? In: Brubaker, S., ed. Rethinking the federal lands. pp.108-121.
The author addresses two questions: 1) What groups or institutions have an interest in federal lands, 2) "How effective are current laws governing management of these lands, and would different tenure arrangements be better for the groups or institutions affected?" (p.109)

663 Hyde, W.F., 1984. The federal preserve in the West: Environmental champion or economic despoiler? In: Johnston, G.M. and Emerson, P.M., eds. Public lands and the U.S. economy. pp.117-131.

664 Jackson, D.H., 1984. Divestiture, harvest expansion and economic efficiency: The national forests in the early 1980s. In: Johnston, G.M. and P.M. Emerson, eds., Public lands and the U.S. economy, pp. 133-169.
"This paper attempted to address two major issues confronting current national forest timber management. First, the federal government must find ways to manage more efficiently any and all of its programs. Second, the federal government must determine what programs it wants to encourage and what it wants to eliminate." (p.165).

665 Johnston, G.M. and Emerson, P.M., eds., 1984. Public lands and the U.S. economy: Balancing conservation and development. Proceedings of a conference sponsored by the Wilderness Society. Boulder, Colorado, Westview Press. 309 pp.
"A discussion of the means by which lands and resources administered by the Forest Service and Bureau of Land Management can better serve the present and future needs of all U.S. citizens." (p.xv).

666 Johston, G.M., 1984. Community stability and the federal lands. In: Johnston, G.M. and P.M. Emerson, eds., Public lands and the U.S. economy, pp. 171-182.

"Suggested changes in Forest Service timber management... lead to distributional issues asscociated with timber resouce dependent community stability, as well as environmental concerns." (p.171).

667 Lekachman, R., 1984. Public timber and the public interest. In: Gamache, A.E., ed., Selling the federal forests, pp. 76-83.

668 Leman, C.K., 1984. How the privatization revolution failed, and why public land management needs reform anyway. In: Francis, J.G. and R. Ganzel, eds. Western public lands, pp. 110-128.

669 Leman, C.K., 1984. The revolution of the saints: The ideology of privatization and its consequences for the public lands. In: Gamache, A.E., ed. Selling the federal forests. pp.93-162.

670 Lesky, J.D., 1984. Sharing federal multiple-use lands: Historic lessons and speculations for the future. In: Brubaker, S., ed. Rethinking the federal lands. pp.235-274.

"Federal land management today is characterized by a marked sharing of power with various nonfederal entities." (p.235)

671 Libecap, G.D., 1983. The efficiency case for the assignment of private property rights to federal lands. In: Truluck, P.N., ed. Private rights and public lands. pp.29-37.

"This paper begins with an analysis of past federal policies to determine why so much land was reserved by the government. Of concern is whether retention was based on public good arguments or other efficiency considerations." (p.29)

672 MacCleery, D., 1984. The public interest in the federal lands and the Reagan Administration's Asset Management Program. In: Johnston, G.M. and P.M. Emerson, eds. Public lands and the U.S. economy, pp. 19-24.

673 MacCleery, D.W., 1984. The U.S. Department of Agriculture's asset management program. In: Gamache, A.E., ed., Selling the federal forests. pp. 176-183.

"The Asset Management Program...is designed to identify those parcels of federal land that should be disposed of." (p. 176).

674 Merrifield, J., 1983. Using analog regions to assess the economic impact of federal land management policies. Professional Geographer, 35:298-302.

"A case study illustrates how an analog region estimates the net economic impact of Grand Teton National Park on Teton County, WY. Approximately one-third of the economic activity attributed to the park would still be present in the absence of the park." (p.298)

675 Nelson, R.H., 1984. Ideology and public land policy: The current crisis. In: Brubaker, S., ed., Rethinking the federal lands. pp. 275-298.

An "important possiblility is that federal land ownership is mostly an accident of history, and that major changes would follow from an effort to make land tenure accord with basic economic and political principles."

(p.297).

676 Resler, R.A., 1984. The future of federal forest lands: Why the public will retain ownership of the federal forest and range lands. In: Gamache, A.E., ed., Selling the federal forests. pp. 47-62.

677 Runge, C.F., 1984. Energy exploration on wilderness: "Privatization" and public lands management. Land Economics 60:56-68.

678 Runge, C.F., 1984. An economist's critique of privatization. In: Johnston, G.M. and Emerson, P.M., eds. Public lands and the U.S. economy. pp.69-75.
A critique of the Baden & Lueck paper in the same volume.

679 Sax, J.L., 1984. The claim for retention of the public lands. In: Brubaker, S., ed. Rethinking the federal lands. pp.125-148.
The author argues that sale of the public lands "would in fact be a step backwards from the new balance that is everywhere being struck between the claims of privatism and of public values." (p.147)

680 Shanks, B., 1984. Subsidization and privatization of federal rangeland: A California perspective. In: Johnston, G.M. and P.M. Emerson, eds. Public lands and the U.S. economy, pp. 257-259.

681 Stroup, R.L. and Baden, J.A., 1983. Timber beasts, tree huggers,and the old folks at home. In: Stroup, R.L. et al., eds. Natural resources: Bureaucratic myths and environmental management. pp. 111-127.
The authors perceive two major problems involved with public timber management: (1) "the U.S. Forest Service systematically supports inefficient timber production," and, (2) "The Forest Service has forced taxpayers to underwrite the costs of logging uneconomical sites." (pp. 111-112).

682 Stroup, R.L. and Baden, J.A., 1983. The demise of the Sagebrush Rebellion and other vanquished dreams. In: Stroup, R.L. et al., eds. Natural resources: Bureaucratic myths and environmental management. pp. 99-110.
"As its main goal, the Sagebrush Rebellion has fought for transfer of federal land to the states." (p.99).

683 Stroup, R.L., 1984. Weaknesses in the case for retention. In: Brubaker, S., ed. Rethinking the federal lands, pp. 149-155.

684 Truluck, P. N., ed., 1983. Private rights and public lands. Washington, D.C., Heritage Foundation. 95pp.
Proceedings of a conference held in Washington, D.C., the theme of which was "the viability of pursuing privatization reforms for the public lands in the United States." (p.v)

685 Vance, M., 1983. Public lands: A bibliography. Monticello, Illinois, Vance Bibliographies. Public Administration Series: Bibliography P-1212. 20pp.

686 Waggener, T.R., 1984. Federal commercial forest lands: Origins, status, and issues. In: Gamache, A.E., ed. Selling the federal forests. pp.1-20.

PRIVATE - GENERAL

687 Archey, W.E., 1982. Private forest landowner characteristics and attitudes as related to forest management goals and service needs in Berkshire County, Massachusetts. Ph.D. thesis, Univ. of Mass. Ann Arbor, Mich., Univ. Microfilms Int. 137 pp.

Questionnaires were sent to 3505 forest landowners to assess landowner characteristics and attitudes regarding their woodland. "Of special interest wre those landowner characteristics which might relate to timber availability and influence woodland use." (p.iv).

688 Bigger, D., Chambers, C., and Smego, J., 1983. Economic analysis of nonindustrial private forestlands - small parcel ownerships. Washington Dept. of Natural Resources, DNR note 41. 14 pp.

689 Brubaker, S., 1983. Land use concepts. In: Sedjo, R.A., ed. Government interventions, social needs, and the management of U.S. forests. pp. 95-114.

690 Ewing, R.A. and Parry, B.T., 1983. Anticipating changes in private landowner commitment to forestry. In: Bell, J.F. and T. Atterbury, eds., Renewable resource inventories for monitoring changes and trends. pp. 55-57.

"Concern that private landowner commitment to forestry is changing and that a large portion of the private land base in undergoing... conversion has become a political issue" in California. (p.55).

691 Hayami, T., 1984. Management practice of a private forest. In: Nagumo, H. et al., eds. Proc. IUFRO Symp. on Forest Management Planning and Managerial Economics. pp. 253-262.

692 Johnson, M.B., 1983. Regulation of private forest lands: The taking issue. In: Sedjo, R.A., ed., Governmental interventions, social needs, and the management of U.S. forests. pp. 176-194.

The author states that "taking requires compensation and regulation does not" ... and "that regulation without compensation is the rule rather than the exception in recent experince." (pp.177,179).

693 Smith, J.H.G., 1984. Impacts of land tenure on forest management in Western Canada. In: Lortie, M., ed. Forest resources management--the influence of policy and law. pp.209-214.

"There is some evidence that the highest intensity and best quality of management are found on large blocks of land owned by major companies that manufacture forest products." "Small non-industrial private landowners pay the least attention to forest management." (p.209)

INDUSTRIAL

694 Galvao, A.P.M. and do Couto, H.T.Z., 1984. Man-made industrial forests in Brazil: Prospects and constraints. In: Wiersum, K.F., ed. Strategies and designs for afforestation, reforestation and tree planting. Wageningen, Pudoc. pp.129-136.

695 Sedjo, R.A., 1983. The comparative economics of plantation forestry: A global assessment. Washington, D.C., Resources for the Future. 161pp.
Two issues are addressed: (1) The economic feasibility of forestry plantations in various areas of the world; (2) the long term ecological impacts of plantations in tropical areas. (p.x)

696 Sedjo, R.A., 1984. An economic assessment of industrial forest plantations. Forest Ecology and Management 9:245-257.
"The results of a detailed investigation of the comparative economics of industrial forest plantations in twelve regions of the globe, including nine in the tropics and Southern Hemisphere, are reported." (p.245)

697 Sedjo, R.A., 1984. Industrial forest plantations: An economic assessment. In: Wiersum, K.F., ed. Strategies and designs for afforestation, reforestation and tree planting. Wageningen, Pudoc. pp.286-300.

NONINDUSTRIAL

698 Allen, R.,Chairman, 1984. National Forum on Nonindustrial Private Forest Lands, St. Louis, 1983. [Proceedings] U.S. For. Serv., State and Private Forestry. 84 pp.
Cover title: Nonindustrial Private Forest Lands Forum: Issues, options, and responsibilities.

699 Binkley, C.S., 1983. Private forestland use: Status, projections, and policy implications. In: Royer, J.P. and C.D. Risbrudt, eds., Nonindustrial Private Forests... Symposium Proceedings, pp. 51-70.

700 Birch, T.W., 1983. Northeastern woodland ownership study - the second time around. In: Bell, J.F. and T. Atterbury, eds., Renewable resource inventories for monitoring changes and trends. pp. 62-65.
Reports on a survey of private forest land owners in the 14 northeastern states. Trend information gathered in the survey "can be used by policymakers to evaluate programs and by forest industry to forecast timber availabilty...." (p.62).

701 Birch, T.W., 1983. Private forestland owners in the United States: Their number and characteristics. In: Royer, J.P. and C.D. Risbrudt, eds., Nonindustrial Private Forests... Symposium Proceedings, pp. 71-75.

702 Casey, L.R. and Kingsley, N.P., 1984. The effects of landowner tenure on the management of nonindustrial private forest land. In: Lortie, M., ed., Forest resources management - the influence of policy and law, p. 236-239.

703 Crowell, J.B., Jr., 1983. Improved productivity from nonindustrial private forests: Dimensions of the problem. In: Royer, J.P. and C.D. Risbrudt, eds. Nonindustrial Private Forests... Symp. Proc. pp. 13-18.

704 Dickson, A., 1983. Motivating woodlot management in Europe and North America: A literature review. A background paper for the N.B. Private Woodlot Resources Study. No place; no publisher. 85 pp. (in English and French).

705 Dickson, A., 1985. Can private woodlots supply more wood to industry? Canadian Forest Industries 105(2):20-25,34.
Author concludes that "private woodlots are capable of supplying much more wood to industry than they presently do...." (p.25).

706 Dutrow, G.F., 1983. Economics of small woodlot forestry. In: Proceedings of the Symposium on the Loblolly Pine Ecosystem (East Region), Raleigh, 1982, pp. 278-284.

707 Eckmullner, O., 1985. The Austrian farm woodland in the eighties. Allgemeine Forstzeitung, 96:56-59.
(In German). The structure and development of the agricultural and forest enterprises in Austria in the last twenty years is represented in

terms of figures. The Austrian forest policy has to take into consideration more than 200,000 forest owners with an area of 1,65 millions of hectares. (WK)

708 Fedkiw, J., 1983. Background paper on non-industrial private forest lands, their management, and related public and private assistance. U.S. Forest Service. 127 pp.
This paper "provides a comprehensive summary of current information available on nonindustrial private timber resources and expected demands on those resources. It also reviews their ownership and management status and the programs and assistance available from Federal, State, industry,and consultant sources...." (p.iii).

709 Franklin, E.C., 1984. Low-cost forestry: Effective strategies for limited-resource landowners. In: Proc. of the Symposium on Increasing the Involvement of Minorities and Women in Renewable Resouces, Greensboro, North Carolina, 1983. Southern Rural Development Center, SRDC Series no. 71, pp. 69-73.

710 Gregersen, H. and Plochmann, R., 1983. Public management related to private forestry. Paris, Organisation for Economic Cooperation and Development. Working document, 1st revision. 40 pp.

711 Helles, F., 1984. On alteration of generations in the ownership of Danish forests. In: Schmithusen, F., ed. Forestry legislation. pp.48-59.
"Increasing taxes have made the transfer of ownership of Danish forests between generations very problematic." (p.48)

712 Kaiser, H.F., 1983. Management practices and reforestation decisions in the south. In: Royer, J.P. and C.D. Risbrudt, eds. Nonindustrial Private Forests... Symp. Proc. pp.76-84.

713 Kelley, R.G., Jr., 1983. Vermont landowners and forest management. In: Royer, J.P. and C.D. Risbrudt, eds. Nonindustrial Private Forests... Symp. Proc. pp.319-326.

714 Lyons, J.R., 1983. Nonindustrial private forest management: A national perspective on issues. In: Royer, J.P. and C.D. Risbrudt, eds. Nonindustrial Private Forests... Symp. Proc. pp. 23-29.

715 Mine, I., 1984. Improved managements of private forest owners in Japan. In: Nagumo, H. et al., eds. Proc. IUFRO Symposium on Forest Management Planning and Managerial Economics. pp. 100-108.

716 Nabi, D.H., Guynn, D.C., Jr., Wigley, T.B. and Mott, S.P., 1983. Forest resource values of Mississippi nonindustrial private forest landowners. In: Royer, J.P. and C.D. Risbrudt, eds. Nonindustrial Private Forests... Symp. Proc. pp. 338-342.

717 O'Laughlin, J., Cleaves, D.A. and Skove, D.J., 1983. Forest industry programs for NIPFs: Management assistance and privately funded cost-sharing. In: Royer, J.P. and C.D. Risbrudt, eds. Nonindstrial Private Forests... Symp. Proc., pp. 241-251.
The most common form of landowner assistance available directly from forest industry companies is the "managment assistance or management

agreement program (MAP)." (p.241).

718 O'Leary. J.T., Zumeta, D.C. and Pace, R.M., 1983. Differential targeting in policy development for nonindustrial private forestlands. In: Royer, J.P. and C.D. Risbrudt, eds. Nonindustrial Private Forests... Symp. Proc., pp. 301-308.

719 Pinkett, H.T., 1982. United States government policy relating to private forestry. In: Actes du Symposium International d'Histoire Forestiere 2:224-232/

720 Plochmann, R., 1983. Nonindustrial private forestry: An international perspective. In: Royer, J.P. and C.D. Risbrudt, eds. Nonindustrial Private Forests... Symp. Proc. pp. 30-34.

721 Powell, D.H., 1983. Industry's NIPF initiatives: Managing for productivity. In: Royer, J.P. and C.D. Risbrudt, eds. Nonindustrial Private Forests... Symp. Proc. pp. 19-22.

722 Royer, J.P. and Risbrudt, C.D., eds., 1983. Nonindustrial private forests: A review of economic and policy studies: Symposium proceedings April 19-20, 1983. Durham, N.C., Duke University School of Forestry and Environmental Studies. 398pp.

723 Royer, J.P., Dutrow, G.F., and Kaiser, H.F., 1983. Estimating the response of nonindustrial private forest landowners to investment opportunities and public programs. In: Seppala, R., Row, C., and Morgan, A., eds. Forest sector models. pp.199-214.

724 Shealy, J., 1982. The importance of the nonindustrial landowner to the timber industry. In: Clason, T., ed. Multiple use land management for nonindustrial pine forest landowners. pp. 1-3.
67% of forest land in Louisiana is owned by the private nonindustrial landowner. (p.3).

725 Stone, R.N. and McKeever, D.B., 1983. Estimating timber production for U.S. farm and other private forests. In: Royer, J.P. and C.D. Risbrudt, eds. Nonindustrial Private Forests... Symp. Proc. pp. 37-50.

726 Straka, T.J. and Wisdom, H.W., 1982. Fundamental relationships affecting nonindustrial private forest timber output. In: Granskog, J.E. and H.L. Haney, Jr., eds. How to cope with hard times: Proc. Southern For. Econ. Workshop, pp. 43-57.
"Size of forest holding is inversely related to a NIPF landowner's alternative rate of return (ARR)." (p.43).

727 Takahashi, N., 1982. Production activities of forestry households not engaged in farming in Japan. In: Japanese Forest Economic Society. The current state of Japanese forestry (II), pp. 64-74.
A discussion of how forestry households not engaged in farming manage forest land.

728 Vaux, H.J., 1983. State intervention on private forests in California. In: Sedjo, R.A., ed. Governmental intervention, social needs, and the management of U.S. forests. pp.124-168.

"Public intervention in the use and management of private property has had a long history in California." (p.124)

## LABOR CONSIDERATIONS - WORK STUDIES

729 Brabander, H.D., Kuppers, J.-G., and Mascher, R., 1985. Die Bedeutung der Eigenarbeit im Privatwald Niedersachsens. Schriften aus der Forstlichen Fakultat der Univ. Gottingen, v. 79, 127pp. (In German, Eng. summary).

English title: The significance of owners work in private forests of Lower Saxony. "In general, the relative portion of self-labor becomes less with increasing size of ownership." (p.112)

730 International Labour Office, 1983. Occupational safety and health in the wood and wood products industries. Vienna, United Nations Industrial Development Organization, Division for Industrial Studies, Sectoral Studies Branch, Sectoral Working Paper Series no 9; UNIDO/IS.410. 59 pp.

731 International Seminar on Ergonomics Applied to Forestry, Vienna and Ossiach, Austria, 1983. Proceedings. Economic Commission for Europe, Food and Agriculture Org., International Labour Org., Joint Comm. on For. Work. Tech. and Train. of For. Workers, Int. Union of For. Res. Org. 1983. 256 pp.

732 Prebble, R.L., [editor], 1984. Human resources in logging: The proceedings of a seminar held in Rotorua, June, 1984. Rotorua, N.Z., Logging Research Assoc., Inc. 229 pp.

733 Vigus, T.R., 1984. Labour productivity in forestry plantations in Papua New Guinea. Klinkii 2(4):75-79.

According to the author, Papua New Guinea has a "poor record of reforestation," and "labour productivity is a critical factor." (p.75)

PROTECTION

734 Aneja, Y.P. and Parlar, M., 1984. Optimal staffing of a forest fire fighting organization. Canadian Journal of Forest Research, 14:589-594.
"This paper deals with finding the optimal size of a forest fire fighting organization." (p.589).

735 Bailey, D.W., Suenram, B., and Costamagna, J., 1984. A teamwork approach to multiagency fire management. Fire Management Notes 45(3):9-11.

736 Balmer, W.E. and Mobley, H.E., 1983. Damaged stands: Appraisal of damages, recovery potential and management decisions. In: Stone, E.L., ed. The Managed Slash Pine Ecosystem. pp.288-303.

737 Dube, D., 1984. International cooperation in forest fire research. In: Lortie, M., ed. Forest resources management--the influence of policy and law. pp.401-404.

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739 Maxwell, W.G., Sandberg, D.V., and Ward, F.R., 1983. Fuels and fire in land-management planning: Part 3. Costs and losses for management options. U.S. For. Serv., Gen. Tech. Rep. PNW-158. 18pp.
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740 Mercier, J.C., 1984. The protection of the forest: A social and economic imperative. In: Lortie, M., ed., Forest resources management--the influence of policy and law. pp.149-153.
Protection programs are necessary to insure continued investments in the forest products sector.

741 Moak, J.E., 1982. Cost analysis of prescribed burning. In: Shilling, C.L. and J.R. Toliver, eds., Proc. of a Workshop on Prescribed Burning in Forest Management, pp. 32-39.

742 O'Laughlin, J., 1982. Economics of alternatives to prescribed burning. In: Shilling, C.L. and J.R. Toliver, eds., Proc. of a Workshop on Prescribed Burning in Forest Management, pp. 40-47.

743 Pyne, S.J., 1984. Prelude to sustained-yield forestry: The origins of systematic fire protection in the United States. In: Steen, H.K., ed. History of Sustained-Yield Forestry: A Symposium, 1983, pp. 68-78.

744 Simard, A. J., 1984. Wildland fire research in the USDA Forest Service: Opportunities for international cooperation. In: Lortie, M., ed. Forest resources management--the influence of policy and law. pp.408-410.

745 Williams, J.R., 1984. A private landowner perspective of state policy, economics, and responsibility in spruce budworm control. In: Lortie, M., ed., Forest resources management - the influence of policy and law, pp. 154-160.
"Various economic and legal considerations with benefit/cost ratios from protection are described." (p.154).

PRODUCTION OF FOREST GOODS AND SERVICES

OUTDOOR RECREATION - TOURISM

746 Akesen, A., 1983. Estimating recreational demand for the forest recreation areas in Turkey. In: Bell J.F. and T. Atterbury, eds. Renewable resource inventories for monitoring changes and trends. pp. 231-234.
Reports on research "aimed at estimating recreational demand values in two forest recreation areas" in Turkey. Statistical and economic analyses were used. (p. 231).

747 Aki, S., 1984. The forest management for landscape and recreational uses. In: Nagumo, H. et al., eds Proc. IUFRO Symp. on Forest Management Planning and Managerial Economics. pp. 146-152.

748 Bammel, E.C., 1983. Multiple use: Recreational potential in forest industries - and some problems. In: Dempsey, G.P. and K.S. Price, eds. Governor's Conference on West Virginia's Forest Industry. pp. 157-163.

749 Bartelheimer, P., 1981? Economics of recreation forestry and human environment. In: Gundermann, E. and H.F. Kaiser, comp., Research today for tomorrow's forests, pp. 1-6.
"There are no absolutely reliable and steady methods available which define the potential of forests relative to their social functions. It remains a challenge for research to quantify these outputs by economic or other utility measures." (p.5).

750 Beaman, J. and Meis, S., 1983. Managing the research function for more effective policy formulation and decision-making. In: Lieber, S.R. and D.R. Fesenmaier, eds., Recreation planning and management, pp. 380-393.

751 Becker, R.H., Jubenville, A. and Burnett, G.W., 1984. Fact and judgment in the search for a social carrying capacity. Leisure Sciences 6:475-486.

752 Bevins, M.I., 1984. The influence of policy, law, and education on the impact of international tourism. In: Lortie, M. ed., Forest resources management - the influence of policy and law, pp. 177-179.

753 Bignell, A.W. and Smith, B.N.P., 1984. Environment and recreation: Conflict or compromise? In: Dingwall, P.R., comp. People and parks, pp. 16-22.
The number of people in New Zealand wanting to use forests for recreation is increasing. The author believes that environmentalists may have to make some compromises and accept a wider range of recreational activities than is presently acceptable in protected areas. (p.20).

754 Bignell, A.W., 1984. How useful are our recreation data? A critical review of recreation surveys. In: Dingwall, P.R., comp. People and parks, pp. 23-32.

755 Boteler, F.E., and Smith, H.C., 1984. Public preferences for visual resources: A summary of research findings. West Virginia Forestry Notes 11:1-4.

756 Bovaird, A.G., Tricker, M.J., and Stoakes, R., 1984. Recreation management and pricing: The effect of charging policy on demand at countryside recreation sites. Brookfield, VT, Gower Publ. Co. 182pp.

757 Brown, P.J., 1984. Benefits of outdoor recreation and some ideas for valuing recreation opportunites. In: Peterson, G.L. and A. Randall, eds. Valuation of wildland resource benefits. pp. 209-220.

758 Burde, J. and Chandler, G., 1981. Recreationist perceptions of eastern hardwood timber management. In: Gundermann, E. and H.F. Kaiser, comp., Research today for tomorrow's forests, pp. 7-14.
"The results of this study showed that the uncut area was preferred to harvested areas with respect to scenic beauty." (p.7).

759 Catton, W.R., Jr., 1983. Social and behavioral aspects of the carrying capacity of natural environments. In: Altman, I. and J.F. Wohlwill, eds. Behavior and the natural environment. New York, Plenum. pp. 269-306.

760 Christensen, J.B., 1981. Economics of recreation forestry in Scandinavia. In: Gundermann, E. and H.F. Kaiser, comp., Research today for tomorrow's forests, pp. 15-28.

761 Christensen, J.B., 1984. Recreation economics: Some results from a Danish study. In: Saastamoinen, O., et al., eds. Multiple-use Forestry in the Scandinavian Countries, Symp., 1982, Proc. Communicationes Instituti Forestalis Fenniae 120:52-59.
"This study attempts to establish a value for forest recreation...." (p.52).

762 Clawson, M. and Van Doren, C.S.,eds., 1984. Statistics on outdoor recreation. PartI: The record through 1956. Part II: The record since 1956. Washington, D.C., Resources for the Future. 368pp.

763 Collins, R. and Hodge, I., 1984. Clustering visitors for recreation management. Journal of Environmental Management 19:147-158.
"This paper examines the activity patterns of visitors to a national park which supports... a range of uses." (p.147).

764 Cordell, H.K. and Stevens, J.H., Jr., 1983. A national survey to determine public outdoor recreation opportunities on nonindustrial private forest and range lands. In: Royer, J.P. and C.D. Risbrudt, eds. Nonindustrial Private Forests... Symp. Proc. pp.327-333.

765 Cordell, H.K., Hendee, J.C., and Stevens, J.H., Jr., 1983. Renewable recreation resources in the United States: The resource situation and critical policy issues. In: Lieber, S.R. and D.R. Fesenmaier, eds. Recreation planning and management. pp.241-278.
The authors "analyzed social and economic factors related to future outdoor recreation supply and use, and from this analysis have briefly identified issues and needed actions." (p.243)

766 Daniel, T.C. and Vining, J., 1983. Methodological issues in the assessment of landscape quality. In: Altman, I. and Wohlwill, J.F., eds. Behavior and the natural environment. New York, Plenum. pp.39-84.

Provides an overview of contemporary landscape-quality assessment methods. Defines several landscape assessment models.

767 Driver, B. and Brown, P.J., 1983. Contributions of behavioral scientists to recreation resource management. In: Altman, I. and J.F. Wohlwill, eds. Behavior and the natural environment. New York, Plenum. pp. 307-339.

768 Driver, B.L. and Harris, C.C., 1981. Improving measurement of the benefits of public outdoor recreation programs. In: Gundermann, E. and H.F. Kaiser, Comp., Research today for tomorrow's forests, pp. 46-55.

769 Dwyer, J.F., 1983. Recreation benefits for benefit - cost analysis. In: Lieber, S.R. and D.R. Fesenmaier, eds., Recreation planning and management, pp. 26-35.

"Outlines methodology appropriate for estimating recreation benefits for benefit - cost analysis." (p.26).

770 Gilbert, A.H. and Lindsay, J.J., 1984. Resource allocation for leisure. In: Lortie, M., ed., Forest resources managment - the influence of policy and law, pp. 180-184.

"The recreation and tourism industry must successfully compete with others in the land use industry if outdoor recreation environments are to exist in our urbanizing landscapes. There is a need to appraise all lands for their recreation value before land conversion takes place." (p.180).

771 Gundermann, E. and Kaiser, H.F., comp., 1981. Research today for tomorrow's forests: Proceedings for Outdoor Recreation Economics, XVII IUFRO World Congress, Kyoto, Sept., 1981. International Union of Forestry Research Organizations. 157pp.

772 Gundermann, E., 1981. Evaluation of the recreation evaluation methods used in Western Europe. In: Gundermann, E. and Kaiser, H.F., comp., Research today for tomorrow's forests. pp.71-76.

773 Illyes, B., and Keresztesi, B., 1981? Economic assessment of the recreational function of forests in East European countries. In: Gundermann, E. and H.F. Kaiser, comp., Research today for tomorrow's forests, pp. 77-92.

774 Imanaga, M., 1981? Economics of the recreational function of forests in Japan. In: Gundermann, E. and H.F. Kaiser, comp., Research today for tomorrow's forests, pp. 93-98.

775 Jubenville, A. and Becker, R.H., 1983. Outdoor recreation management planning: Contemporary schools of thought. In: Lieber, S.R. and D.R. Fesenmaier, eds., Recreation planning and management, pp. 303-319.

776 Jubenville, A., 1981. Research recreationshed: An experimental program to measure changing social values. In: Gundermann, E. and H.F. Kaiser, comp., Research today for tomorrow's forest, pp. 99-104.

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forests. pp.105-111.

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779 Kelly, J.R., 1983. Social benefits of outdoor recreation: An introduction. In: Lieber, S.R. and Fesenmaier, D.R., eds. Recreation planning and management. pp.3-14.

780 Knopf, R.C., 1983. Recreational needs and behavior in natural settings. In: Altman, I. and J.F. Wohlwill, eds., Behavior and the natural environment. New York, Plenum. pp. 205-240.
The author's stated purpose is "to search the emerging outdoor recreation literature for data potentially useful in describing human linkages with nature." (p.206).

781 Koch, N.E., 1984. Project "Forest and Folk": A summary. In: Saastamoinen, O., et al., eds., Multiple-Use Forestry in the Scandinavian Countries, Symp., 1982, Proc. Communicationes Instituti Forestalis Fenniae. 120:44-51.
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782 Kroth, W., Fischer, H., and Bartelheimer, P., 1984. Impacts on forestry resulting from protective and recreational functions. Schriftenreihe des Bundesministers fur Ernahrung, Landwirtschaft und Forsten, A (Angewandte Wissenschaft) no. 298, 83 pp.
(In German) In 1982/83 a sample survey was conducted in the Federal Republic of Germany. For 1981 the additional costs and diminishing returns caused by protective and recreational functions of the forest amount to 348 millions of D-mark. (WK)

783 La Page, W.F., 1983. Planning and research: Forging a partnership for recreation's future. In: Lieber, S.R. and D.R. Fesenmaier, eds., Recreation planning and management, pp.374-379.

784 La Page, W.F., 1983. Visitor resource management for visitor satisfaction. In: Lieber, S.R. and D.R. Fesenmaier, eds., Recreation planning and management, pp.279-285.

785 Langenau, E.E., Jr. et al., 1984. Attitudes toward oil and gas development among forest recreationists. Journal of Leisure Research 16: 161-177.
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786 Leatherberry, E.C., 1984. A theoretical basis for understanding black participation in wildland recreation. In: Proc. of the Symposium on Increasing the Involvement of Minorities and Women in Renewable Natural Resources, Greensboro, North Carolina, 1983. Southern Rural Development

Center, SRDC Series no. 71, pp. 137-150.
"Available data indicates that black participation in wildland recreation is lower than white participation." (p.145).

787 Lee, M.E., Brown, P.J., and Manfredo, M.J., 1983. User validation of planning criteria for inventorying and monitoring recreation resources. In: Bell, J.F. and T. Atterbury, eds., Renewable resource inventories for monitoring changes and trends, pp. 318-322.
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788 Levitt, H. et al., 1983. Marketing parks and recreation. Prepared by the Park and Recreation Technical Services Division, Western Regional Office, National Park Service. State College, PA, Venture Publ. Co. 170pp.
"How an agency markets its programs or services has become critical to the management function." (p.iii) "This book is written for public and nonprofit recreation and park agency managers who are interested in increasing user satisfaction, expanding clientele, increasing revenues, saving money and building a constituency." (p.iv)

789 Lieber, S.R. and Fesenmaier, D.R.,eds., 1983. Recreation planning and management. State College, PA, Venture Publ. 396pp.
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Examines the significance of the siting of publicly owned conservation and recreation properties in Illinois as they impact local areas. (p.37)

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797 Peterson, G.L., 1983. Rationing and redistribution of recreational use of scarce resources with limited carrying capacity. In: Lieber, S.R. and Fesenmaier, D.R., eds. Recreation planning and management. pp.286-302.

798 Rosenthal, D.H., and Anderson, J.C., 1984. Travel cost models, heretoskedasticity, and sampling. Western Journal of Agricultural Economics, 9:58-65.
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799 Savolainen, R. and Kellomaki, S., 1984. Scenic value of the forest landscape as assessed in the field and the laboratory. In: Saastamoinen, O. et al., eds. Multiple-Use Forestry in the Scandinavian Countries, Symp., 1982, Proc. Communicationes Instituti Forestalis Fenniae 120:73-80.

800 Sax, J.L., 1982. The compromise called for. In: Connally, E.H., ed. National parks in crisis. pp.55-73.
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This study found that "the public is willing to bear a substantial portion of the actual costs of recreation through increased entrance and user fees." (p.65)

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812 Altman, I. and Wohlwill, J.F., eds., 1983. Behavior and the natural environment. New York, Plenum. 346 pp.
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813 Arnett, G.R., 1984. Cooperation between government and the private sector: A North American example. In: McNeely, J.A. and K.R. Miller, eds., National parks, conservation, and development. pp. 534-537.

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815 Baden, J. and Lueck, D., 1984. A property rights approach to wilderness management. In: Johnston, G.M. and P.M. Emerson, eds. Public lands and the U.S. economy, pp. 29-67.
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816 Becker, R.H., Berrier, D. and Barker, G.D., 1985. Entrance fees and visitation levels. Journal of Park and Recreation Admin. 3:28-32.
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818 Boteler, F.E., ed., 1982. Proceedings, third annual conference Wilderness Psychology Group. Sponsored by West Virginia University, Div. of Forestry; Recreation Group, Society of American Foresters. 245 pp.

819 Cahn, R., 1982. The conservation challenge of the 80's. In: Connally, E.H., ed., National parks in crisis, pp. 7-23.
The author advocates the practice of an "environmental ethic."

820 Connally, E.H., ed., 1982. National parks in crisis. Washington, D.C., National Parks and Conservation Association. 220pp.
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821 Dalfelt, A., 1984. The role and constraints of international development agencies in promoting effective management of protected areas. In: McNeely, J.A., and Miller,K.R., eds. National parks, conservation, and development. pp.692-697.

822 Davis, G.D., 1984. Natural diversity for future generations: The role of wilderness. In: Natural Diversity in Forest Ecosystems, Proc. of a Workshop, Athens, Georgia, 1982, pp. 141-154.

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823 Dingwall, P.R., comp., 1984. People and parks: Essays in the development and use of protected areas. Proceedings of Section A4e, 15th Pacific Science Congress, Dunedin, Feb. 1983. New Zealand Dept. of Lakes and Survey, Information Series no. 10. 49 pp.

Includes five essays relating to the "social elements in the development and use of protected areas." (p.3).

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826 Fox, A.M., 1984. People and their park: An example of free running socio-ecological succession. In: McNeely, J.A. and Miller, K.R., eds. National parks, conservation, and development. pp.290-295.

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827 Frome, M., 1982. Building a broader park constituency. In: Connally, E.H., ed., National parks in crisis, pp. 197-203.

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"On all fronts, the very values that make the parks worth saving are being threatened and undermined." The "parks are thoroughly overused--and abused as well." (p.27)

829 Frome, M., editor, 1985. Issues in wilderness management. Boulder, Westview Press. 252 pp.

Includes chapters on: Federal lands - as Bureau chiefs view them; The citizen role in management; Realities of resource conflict; Managing

fire in wilderness; Wilderness and wildlife; Challenges of access, development, outfitting; and Wilderness research.

830 Garratt, K., 1984. The relationship between adjacent lands and protected areas: Issues of concern for the protected area manager. In: McNeely, J.A. and Miller, K.R., eds. National parks, conservation and development. pp.65-71.
"Protected area managers must recognize that..protected areas...are just one element of the total pattern of balanced land use." (p.71)

831 Gavva, I.A., Krinitsky, V.V. and Yazan, Y.P., 1984. Development of nature reserves and national parks in the USSR. In: McNeely, J.A. and K.R. Miller, eds. National parks, conservation and development. pp. 463-465.

832 Gidlund, J.E., 1982. Challenges for Alaska's new parklands. In: Connally, E.H., ed., National parks in crisis, pp. 141-145.
"The nature of the new Park Service lands in Alaska and the provisons of the Alaska Bill require exceptions to many of the NPS rules for management...." (p.141).

833 Gregory, G., 1982. State of the parks 1980: Problems and plans. In: Connally, E.H., ed., National parks in crisis, pp. 75-89.

834 Hammitt, W.E., 1982. Psychological dimensions and functions of wilderness solitude. In: Boteler, F.E., ed., Proc. 3rd annual conf., Wilderness Psychology Group, pp. 50-60.

835 Hardjosentono, P., Hehuwat, F. and Soemarmo, B., 1984. Involvement of politicians in the development of parks and protected areas. In: McNeely, J.A. and K.R. Miller, eds., National parks, conservation and development. pp. 245-248.

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839 Jarvis, T.D., 1982. Adjacent lands and intermingled ownership problems. In: Connally, E.H., ed., National parks in crisis, pp. 91-105.
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842 Kaplan, S. and Talbot, J.F., 1983. Psychological benefits of a wilderness experience. In: Altman, I. and Wohlwill, J.F., eds. Behavior and the natural environment. New York, Plenum. pp.163-203.

843 Kayanja, F. and Douglas-Hamilton, I., 1984. The impact of the unexpected on the Uganda National Parks. In: McNeely, J.A. and Miller, K.R., eds. National parks, conservation, and development. pp.87-92.
"This paper...considers the need for flexibility in planning, including rapid decisive responses to crises and disaster, to enable protected areas to survive through turbulent times." (p.87)

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845 Kozlowski, J.M., 1984. Threshold approach to the definition of environmental capacity in Poland's Tatry National Park. In: McNeely, J.A. and K.R. Miller, eds., National parks, conservation, and development. pp. 450-462.
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"A number of conclusions are drawn which should be applicable to developing countries attempting to balance forest production with the need to preserve a representative range of protected areas." (p.394)

854 Mosley, J.G., 1984. Protected areas and environmental planning in Australia: The continuing evolution of a diverse range of protected areas. In: McNeely, J.A. and Miller, K.R. eds. National parks, conservation, and development. pp.274-282.

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objective of this paper is to report on an experimental study designed to measure the economic value of visibility in the national parklands of the Southwest." (p.149)

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D.M., eds., Forestland grazing. p.101-103.

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"This paper presents a multilevel analytical system for national-level forest and rangeland planning."

883 Howitt, R.E., 1983. Rangeland as a collective capital good. In: Wagstaff, F.J., comp. Proc.- Range Econ. Symp. and Workshop, 1982. U.S. For. Serv. Gen. Tech. Rep. INT-149. pp. 32-37.
"Capital goods are defined as having nonconvex transaction cost." (p.32).

884 Infanger, C.A., 1983. Issues and priorities for range economics research. In: Wagstaff, F.J., comp., Proc.- Range Econ. Symp. and Workshop, 1982. U.S. For. Serv. Gen. Tech. Rep. INT-149 pp. 138-142.

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"A major challange now facing those involved in this area of study is that of developing an effective communication system." (p.85).

886 Martin, W.E., 1984. The distribution of benefits and costs associated with public rangelands. In: Johnston, G.M. and P.M. Emerson, eds., Public lands and the U.S. economy, pp. 229-256.
"The author concludes that neither the issue of economic efficiency nor welfare distribution is as simple as many proponents of privatization have maintained. A management system much like the current system is suggested." (p. 229).

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898 Kaplan, R., 1983. The role of nature in the urban context. In: Altman, I. and Wohlwill, J.F., eds. Behavior and the natural environment. New York, Plenum. pp.127-161.

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914 Matsukuma, S., 1984. Forest control system for watershed management.

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923 Lewis, D.K., 1983. Economic problems and constraints facing industrial foresters in considering wildlife needs. In: Wittwer, R.F., ed. Creating good wildlife habitat through forest management and conservation: Conf. Proc. Oklahoma State University. Division of Agriculture. pp. 43-47.

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930 Betters, D.R., Donnelly, D.M. and Worth, H.E., 1984. Opportunities for timber management and wood utilization of the mixed conifer type in Arizona and New Mexico. U.S. For. Serv., Res. Bull. RM-8. 16 pp.

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942 Kellison, R.C., 1982. Cost considerations for regenerating hardwood natural stands and plantations. In: Haymond, J.L., coord. Cost-effective regeneration practices. pp.24-30.

943 Klemperer, W.D., 1984. The economics of timber management contracts in the United States. In: Nagumo, H. et al., eds., Proc. IUFRO Symp on Forest Management Planning and Managerial Economics. pp. 671-682.
"Acreage under long-term leasing and cutting contacts in the southern United States has declined by 30% since 1970. However, such contracts remain an important source of timber supply for many firms. " (p.671).

944 Kumazaki, M., 1984. The role of forestry in Japanese industrialization. In: Japanese Forest Economic Society. The current state of Japanese forestry (III), pp. 84-96.

945 Lorrain-Smith, R., 1982. An economic analysis of silvicultural options for broadleaved woodland. Part III. In: Wood, P.J. National Hardwoods Programme, Report of the Third Meeting, 1982. Oxford, Commonwealth Forestry Institute. pp. 30-32.

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947 McConnell, W.V., 1984. Options in energy wood farming. Southern Journal of Applied Forestry, 8:149-152.
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948 Peterken, G.F., 1982. An economic analysis of silvicultural options for broadleaved woodland. Part I Background. In: Wood, P.J. National Hardwoods Programme, Report of the Third Meeting, 1982. Oxford, Commonwealth Forestry Institute. pp. 23-25.

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"The rationalization of timber flows depends upon perceptions of the appropriate balances among timber and nontimber forest goals, serving local and national interests, and providing benefits to current and future generations." (p.11)

952 Shaffer, R.M., Jr., 1982. A valuation methodology for certain forest industry long-term timber management/cutting contracts. Ph.D., University of Missouri - Columbia. Ann Arbor, University Microfilms Int. (order no. 8326805). 75 pp.
"Forest industry firms view long-term timber management/cutting contracts with private timberland owners as valuable corporate assets... The proposed valuation methodology presented in this paper... provides the firm with an important decision-making process that can be used to evaluate new or existing contracts." (p.69).

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955 Tisdell, C.A., and Silva, N.T.M.H. de, 1983. The economic spacing of trees and other crops. European Review of Agricultural Economics 10:281-293.

956 Uhl, C., Jordan. C.F. and Herrera, R., 1982. Amazon forest management

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The purpose of this paper is "to explain why nutrients are a major constraint to timber production in the Amazon Basin and to suggest... some methods of timber production which conserve ecosystem nutrient stocks." (p.143).

957 Wallinger, R.S., 1982. Forest regeneration from a business management standpoint. In: Haymond, J.L., coord. Cost-effective regeneration practices. pp.52-58.

958 Zobel, B., 1983. Making forests productive by overcoming perceived restraints: Lessons from the U.S.A. In: Sadler, B., ed. Canada's forests: Transition to management. pp. 83-89.

"A few of the perceived constraints to forestry in the south are: (1) planting forest trees does not pay! (2) overstocking is not important! (3) thinning does not pay! (4) our trees are good enough! (5) hardwoods have little value!" (p.88).

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959 Barber, R.L., 1985. The aggregation of age classes in timber resources scheduling models: Its effects and bias. Forest Science. 31:73-82.

960 Bell, E. and Bergsvik, K., 1982. Current harvest practices by the Forest Service. In: LeMaster, D.C. et al., eds. Sustained yield, pp. 61-65.
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961 Berti, R.J., 1984. An assessment of biomass harvesting on small woodlots in New Hampshire. New Hampshire Div. of Forest and Lands and Univ. of New Hampshire Coop. Ext. Serv. 51 pp.
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962 Caulton, R.S., 1982. Economics and costs-insurance. In: Logging Machinery Seminar, Rotorua, N.Z., 1982, Proc., pp. 152-156.

963 Puttock, G.D., 1984. The economic impact of timber harvesting on forest renewal. In: Mechanization of Silviculture: Increasing Quality and Productivity: Proc. of the C.P.P.A./C.F.S. Seminar on Mechanization of Silviculture, Thunder Bay, 1984. pp.57-60.
Presents an example to "demonstrate the economic impact of increasing forest utilization and using full-tree harvesting systems to reduce forest renewal costs." (p.57)

964 Shimotori, S., 1982. Trends and problems in the logging industry in Japan. In: Japanese Forest Economic Society. The current state of Japanese forestry (II). pp.52-63.

965 Tedder, P.L., 1982. Alternative timber harvest scheduling models and their current applications. In: LeMaster, D.C. et al., eds. Sustained yield, pp. 45-51.

966 U.S. Forest Service Productivity Improvement Team, 1984. Wood residue productivity improvement report: Challenge, opportunity, risk, value. U.S. Forest Service. 19 pp. + app.
The team's assignment was to "develop recommendations...that will result in increased efficiency and cost effectiveness of residue management with emphasis on utilization." (n.p.).

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967 Adams, D.M. and Haynes, R.W., 1982. The distributional impacts of departures: Groups and regions. In: Le Master, D.C. et al., eds. Sustained yield, pp. 99-108

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968 Alig, R.J. Lewis, B.J. and Morris, P.A., 1984. Aggregate timber supply analysis. U.S. For. Serv., Gen. Tech. Rep. RM-106. 49 pp.

This paper "is intended as a reference document for analysts of natural resource supplies." (p.1).

969 Alig, R.J., Parks, P.J., Farrar, R.M., Jr., and Vasievich, J.M., 1984. Regional timber yield and cost information for the South: Modeling techniques. U.S. For. Serv., Gen. Tech. Rep. RM-112. 28 pp.

"This report surveys analytical techniques for estimating the timber production of Southern forests under various forestland managment alternatives, and associated costs of those management alternatives."

970 Amano, M., 1984. Timber supply projection model for private forests in Japan. In: Nagumo, H. et al., eds. Proc. IUFRO Symp. on Forest Management Planning and Managerial Economics. pp. 285-292.

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971 Andersson, A.E. and Lesse, P., 1984. Renewable resource economics - optimal rules of thumb. International Institute for Applied Systems Analysis, Working Paper WP-84-84. 22 pp.

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972 Armstrong, G.W., Beck, J.A., Jr., and Phillips, B.L., 1984. Relaxing even-flow constraints to avoid infeasibility with the Timber Resources Allocation Method (RAM). Canadian Journal of Forest Research 14:860-863.

973 Belcher, R., 1984. A study of the fuelwood supply and technical feasibility of converting major state institutions to heating with wood. Michigan Legislative Service Bureau, Legislative Science Office. 38 pp.

"The feasibility of converting nine representative state (Michigan) institutions to heating with fuelwood is evaluated." (p.1).

974 Bertrand, A., 1984. Les filieres d'approvisionnement en combustibles forestires des villes de la zone sahelo-soudanienne. Bois et Forets des Tropiques 204:21-36.

(In French; English summary). Title of English summary: "Supply channels of fuels of forest origin for towns in the Sahelian-Sudanese zone."

975 Binkley, C.S., 1984. Ex post assessment of timber supply forecasts: Lessons from recent efforts in the northeast. In: Irland, L.C., ed., Timber supply in the northeast. Univ. of Maine, College of For. Res., Tech. Note 93, pp. 7-17.
"it is time to move from timber inventory projection in the northeast to the more meaningful notion of timber supply forecasting." (p.12).

976 Blandon, P., 1984. Uncertain prices and timber supply. In: Japanese Forest Economic Society. The current state of Japanese forestry (III), pp. 29-44.

977 Brannlund, R., Johansson, P.O. and Lofgren, K.G., 1984. An econometric analysis of timber supply in Sweden, a summary. In: Tervo, M. and J.A. Selby, eds. Symposium on Forest Products and Roundwood Markets, Hanasaari, 1983. Metsantutkimuslaitoksen Tiedonantoja no. 141; Scandinavian Forest Economics no. 27, pp. 193-202.

978 Clephane, T.P., 1982. Outlook for timber supply/demand through 1990. In: Goetzl, A. and Royer, J.P., eds. Financing forestry investments. pp.18-52.

979 Cross, W.T., 1982. From stump to mill: Wood supply information management. In: Sizemore, W.R., ed. Accounting for the money that grows on and is spent on trees. pp.43-53.

980 Eley, W., 1984. Modeling timber supply and potential yield. In: Irland, L.C., ed. Timber supply in the northeast. Univ. of Maine, College of For. Res., Tech. Note 93. pp.26-30.

981 Erfurth, T., 1984. Trends in timber supplies from tropical regions. In: Dickerhoof, H.E., ed., International Forest Products Trade: Resources and Market opportunities, pp. 109-117.

982 Flores-Rodas, M.A., 1983. World supply of wood-physical resource. In: Bethel, J.S., ed. World trade in forest products. pp.9-18.
"All relevant economic factors and interrelated political, social, cultural, and historical aspects have to be considered in projecting the wood yield possibility." (p.9)

983 Gedney, D.R., 1983. Timber inventories: An underutilized resource that could substantially improve timber supply projections. In: Seppala, R., C. Row, and A. Morgan, eds., Forest sector models, pp. 229-236.

984 Grayson, A.J., 1982. Wood demand and supply: The world scene. In: Malcolm, D.C., ed. Wood-using industries. Edinburgh, Institute of Foresters. pp. 1-11.

985 Haynes, R.W. and Adams, D.M., 1983. Research on TAMM and other elements of the U.S. timber assessment system. In: Seppala, R., Row, C., and Morgan, A., eds. Forest sector models. pp.9-25.
"This paper describes current research efforts to revise and improve the Timber Assessment Market Model (TAMM)." (p.9)

986 Hof, J.G., 1983. Estimating the effects of multiresource and environmental objectives in modeling timber supply. In: Seppala, R., C.

Row, and A. Morgan, eds. Forest sector models, pp. 215-228.

987 Irland, L.C., ed., 1984. Timber supply in the northeast: Can inventories and methods keep up with our changing forest? Papers from the 64th annual winter meeting, NE Section, Society of American Foresters, Worcester, Mass., March, 1984. University of Maine, College of Forest Resources, Tech. Note no. 93. 41 pp.

988 Japan Forest Technical Association, 1983. Wood demand and supply in Japan. Tokyo?, Nippon Mokuzai Bichiku Kiko. 53 pp.

989 Kuuluvainen, J., Loikkanen, H.A. and Salo, J., 1984. On the timber supply behaviour of private nonindustrial forest owners in Finland. In: Tervo, M. and J.A. Selby, eds., Symposium on Forest Products and Roundwood Markets, Hanasaari, 1983. Metsantutkimuslaitoksen Tiedonantoja no. 141; Scandinavian Forest Economics no. 27, pp.150-162.

"The paper presents some of the results of an econometric study on the timber supply behaviour of private nonindustrial forest owners in Finland... Other socio-economic factors being equal, farmers sold more often but less at a time than non-farmers." (p.150).

990 Lyon, K.S. and Sedjo, R.A., 1983. Application of optimal control theory to estimate long-term supply of timber resources. In: Seppala, R., Row, C., and Morgan, A., eds. Forest sector models. pp.165-181.

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992 Pierson, F.N., 1983. Methods of estimating supplies from intensified timber management. In: Seppala, R., Row, C., and Morgan, A., eds. Forest sector models. pp.161-164.

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993 Reed, F.L.C., 1982. Closing the gap on timber supply: A national perspective. In: Saskatchewan Forest Congress, Prince Albert, 1982. Proceedings, pp. 19-27.

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994 Reed, F.L.C., 1984. Canadian timber supply issues. In: Dickerhoof, H.E., ed. International Forest Products Trade: Resources and Market Opportunities, pp. 155-158.

995 Richmond, A.E., 1982. Saskatchewan's timber supply management: A status report. In: Saskatchewan Forest Congress, Prince Albert, 1982 Proceedings, pp. 28-33.

996 Riihinen, P., 1983. Social change and the roundwood supply. In: Royer, J.P. and C.D. Risbrudt, eds. Nonindustrial Private Forests... Symp. Proc. pp. 369-372.

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997 Seymour, R.S. et al., 1985. Green Woods Model: A forecasting tool for planning timber harvesting and protection of spruce-fir forests attacked by the spruce budworm. U.S. For. Serv., Gen. Tec. Rep. NE-91, 38pp.

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1005 Muraoka, D.D., 1983. Improving the efficiency of federal timber sales procedures. Natural Resources Journal 23:815-825.

1006 Schuster,E.G., Keegan, C.E.,III, and Benson, R.E., 1984. Provisions for protecting and enhancing nontimber resources in Northern Region timber sales. U.S. For. Serv., Research Paper INT-326, 9pp.

1007 Sedjo, R.A., 1985. Selling timber at a loss. Resources 79:13-14.

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"for a certain type of widely used long-term cutting contrct in which the firm has the right, but not the obligation, to purchase stumpage at a periodically fixed price, a methodology based on option-pricing is recommended." (p.774).

1009 Shaffer, R.M., Jr., 1985. Sealed-bid timber sales - performance indicators and bidding strategies. Southern Journal of Applied Forestry 9(1):6-10

"Bidding strategies are examined.... Factors affecting bidding performance are discussed." (p.6).

## SOCIAL SCIENCES APPLIED TO FOREST INDUSTRIES

### WOOD-USING INDUSTRIES

1010 Alaska Dept of Natural Resources, Division of Forestry, 1984. Alaska 1983-1984 forest industry directory. Alaska Dept. of Nat. Res., Div. of For., and U.S. Forest Service. 48 pp.

1011 American Paper Institute, 1984. 1984 statistics of paper, paperboard and woodpulp, data through 1983. New York, American Paper Institute. 76 pp.

1012 Barnes, H.M., 1984. Trends in the wood-treating industry: state-of-the-art report. Forest Products Journal. 35(1):13-22.
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1013 Bengston, D.N. and Strees, A., 1984. Intermediate inputs and technical changes in the U.S. lumber and wood products industry. Univ. of Minnesota, College of Forestry, Dept. of For. Res.,Staff Paper Series no 43. 24 pp.
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1016 Blandon, P., 1983. Soviet forest industries. Boulder, Colorado, Westview Press. 290 pp.

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1020 Boguszewski, J., Maxim, L.E. and White, D.E., 1984. Trends in West Virginia domestic fuelwood use. West Virginia Agr. and For. Exp. Sta. Bull. 690. 7 pp.

1021 Canadian Pulp and Paper Association, 1984. Reference tables 1984. Montreal, CPPA, 38th ed. 42 pp.
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1023 Dempsey, G.P. and Price, K.S., eds., 1983. Governor's Conference on West Virginia's Forest Industry: A Workshop Proceedings, Charleston, West Virginia, Nov. 7-8, 1983. Sponsored by Governor's Office of Economic and Community Development and West Virginia Forests, Inc. 208 pp.

1024 Easton, J.C., 1982. Development of wood-based industries. In: Malcolm, D.C., ed. Wood-using industries. Edinburgh, Institute of Foresters. pp.71-81.

1025 Ellefson, P.V. and Stone, R.N., 1984. U.S. wood-based industry: Industrial organization and performance. New York, Praeger. 479pp.
The authors have attempted "to organize, summarize, and interpret existing data on the status and trends in major organizational dimensions of the wood-based industry." (p.v)

1026 Erkkila, D.L., Rose, D.W. and Lundgren, A.L., 1982. Estimating economic impacts of timber-based industry expansion in northeastern Minnesota. U.S. For. Serv., Gen. Tech. Rep. NC-82. 21 pp.
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1027 Eronen, J., 1984. Location strategy and patterns: An empirical investigation of the Soviet pulp and paper industry. Acta Academiae Oeconomicae Helsingies Series A:42. Helsinki School of Economics. 155 pp.
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1028 FAO, 1983. Wood resources and their use as raw material. United Nations Indus. Devel. Org., Sectoral Studies Series no. 3. UNIDO/IS. 399. 177 pp.
Section one includes a review of the world's forest resources, first

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1029 FAO, 1984. Projected pulp and paper mills in the world 1983-1993. Rome, FAO. 111 pp.
"covers pulp and paper expansions for the period 1983-1993, which are actually under construction, are firmly committed, require finance, require approval by the company or government and also those which are tentative. Many mill and machine closures are recorded." (preface).

1030 FAO, 1984. Pulp and paper capacities survey 1983-1988. 178 pp. + annexes.

1031 Francis, G.J., 1982. The future and the wood processing industries. In: Malcolm, D.C., ed. Wood-using industries. Edinburgh, Institute of Foresters. pp. 83-92.

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1035 Malcolm. D.C., ed., 1982. Wood-using industries. Proceedings of a discussion meeting, University of Edinburgh 2-4 April 1982. [Edinburgh] Institute of Foresters of Great Britain. 100 p
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1036 Margl, R.A., 1984. Utilization of patents to determine technology growth trends in the forest products industries. Plan B Paper, University of Minnesota, College of Forestry. 65 pp.

1037 Mawhinney, D.E., 1982. Saskatchewan's unexploited aspen resource; manufacturing and marketing opportunities. In: Saskatchewan Forest Congress, Prince Albert, 1982. Proceedings. pp.56-77.

1038 Milne, G.R., 1984. The Newfoundland sawmill and planing mill industry: Structure, production, and impact on the provincial economy, 1981/82. Newfoundland Forest Research Centre, Info. Rep. N-X-221, 67pp.
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markets, and major contributions to the provincial economy," (p.i)

1039 Milne, G.R., 1984. The Newfoundland sawmill and planing mill industry: Structure, production, and impact on the provincial economy, 1981/82: Summary report. Newfoundland Forest Research Centre, Info. Rep. N-X-222, 7pp.

1040 Milne, G.R., and Mallay, K.G., 1984. The economic impact of the woodworking industry in Newfoundland, 1981. Newfoundland Forest Research Centre, Info. Rep. N-X-220, 39pp.

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1041 Mochida, H., 1984. The character and structure of the logging industry in Japan. In: Japanese Forest Economic Society. The current state of Japanese forestry (III). pp. 55-65.

1042 Moredo, F.C., et al., 1983. Profile of the Philippine forest-based industries: The cottage-type and small-scale industries. FPRDI Journal, 12(1&2):32-44, 68.

"Among the most popular cottage and small-scale forest-based industries are furniture manufacture (wood, rattan, and bamboo), woodcrafts, joinery, shoecraft, rattan and bamboocrafts, wooden toys and musical instruments." (p.32).

1043 Ondro, W.J. and Williamson, T.B., 1982. The forest industry in the economy of Alberta, 1978-1979. Northern Forest Research Centre, Info. Rep. NOR-X-246. 129 pp.

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1047 Reynolds, H.W., 1983. Using West Virginia's lower grade hardwood resource. In: Dempsey, G.P. and K.S. Price, eds. Governor's Conference on West Virginia's Forest Industry, pp. 118-122, and addendum, pp. 123-126.
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1048 Robertson, D., and White, J., coord and edit. asst., 1984. Computer automation for sawmill profit. Madison, Forest Products Research Society. 116 pp.

1049 Robinson, G., 1984. Impact of heavy fuel oil and natural gas prices on the value of biomass delivered to British Columbia pulp mills. Pacific Forest Research Centre, Information Report BC-X-256. 24 pp.
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1050 Schuler, A., 1984. Factors mitigating change in the Canadian sawmilling industry. In: Lortie, M., ed., Forest resources management - the influence of policy and law, pp.302-307.
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1052 Slatin, B., 1984. The changing forest products industries. In: Corcoran, T.J. and Gill, D.R., eds. COFE/IUFRO 1984: A Proceedings. pp.23-34.

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Contains statistics on forest management, the forest industry, commodity production and trade, statistics by industry group, price indices, financial data, etc.

1054 Southern Forest Products Association 1985. Buyer's guide: A listing of products and services available from the members of Southern Forest Products Association. New Orleans, SFPA. 32pp.

1055 Stillinger, J.R., 1982. Potential expansion in the United Kingdom for wood-based panel products. In: Malcolm, D.C., ed. Wood-using industries. Edinburgh, Institute of Foresters, pp. 39-47.

1056 Stone, R.N., 1984. Economic consequences of the South's changing timber resource. Paper presented at the Symposium on Utilization of the

Changing Wood Resource in the Southern United States. Raleigh, N.C., 1984. Mimeo, [12 pp.].

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1058 Young, R.L., 1982. Modeling and forecasting in the forest products industry. In: Granskog, J.E. and Haney, H.L., Jr., eds. How to cope with hard times. pp.97-114.

1059 Zerom, K.M., 1982. Brief notes on the wood and wood products industry of Ethiopia. Regional Meeting for Africa in prep. of the first Consultation on the Wood and Wood Products Industry, Vienna, 1982. United Nations Indus. Dev. Org. ID/WG.373/7. 20pp.

1060 Zinn, G.W., 1983. Prospects for increasing West Virginia's wood products industries. In: Dempsey, G.P. and Price, K.S., eds. Governor's Conference on West Virginia's Forest Industry. pp.81-115.

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1061 Adams, D.M., 1983. Modeling world trade in tropical timber products. Rome, FAO, FO/Misc/83. 105 pp.

1062 Akutsu, T., 1983. U.S. - Japanese trade relations and the pulp and paper industry in Japan. In: Bethel, J.S., ed., World trade in forest products, pp. 137-142.

1063 Anderson, R.G., 1983. Regional production and distribution patterns of the structural panel industry. Tacoma, Wash., American Plywood Assoc. 34 pp.
"The purpose of this report is to provide an analysis of (a) Structural panel production by major producing regions, (b) Shipments by these regions to major trading areas, and (c) to describe the market conditions and economic factors affecting production." (p.1)

1064 Anderson, R.G., 1983. Scandinavian report: A study of wood products markets in the Scandinavian countries. Tacoma, Wash., American Plywood Assoc. 86 pp.

1065 Anderson, R.G., 1984. Italian report: A study of the Italian market for American timber products. Tacoma, Wash., American Plywood Assoc. 54 pp.

1066 Andersson, A.E., 1984. Estimation of forest products demand as an intermediary function. International Institute for Applied Systems Analysis, Working Paper WP-84-91. 17 pp.

1067 Andersson, A.E., Brannlund, R., and Kornai, G., 1984. The demand for forest sector products. International Institute for Applied Systems Analysis, Working Paper WP-84-87. 28 pp.
The authors conclude that their "analysis and the econometric study based on it clearly shows that an intermediate demand approach is the only consistent procedure to be used in demand analysis for the forest sector." (p.26).

1068 Araman, P.A. and Dempsey, G.P., 1984. The U.S. hardwood forest resource situation and our hardwood lumber and dimension market potentials in Europe. In: Dickerhoof, H.E., ed., International Forest Products Trade: Resources and Market Opportunities, pp. 124-132

1069 Araman, P.A., 1984. Good potential seen for hardwood exports. Forest Industries. 111(11):34-36.
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1070 Atkins, R.L., 1983. The role of joint ventures in world trade in wood. In: Bethel, J.S., ed., World trade in forest products, pp. 256-261.
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ventures...." (p.261).

1071 Bartelheimer, P., 1985. Balance sheet of raw wood - development and prospects. Allgemeine Forstzeitschrift 40:39-42.
(In German). The study tries to give an idea of origin of raw wood in the Federal Republic of Germany. The inland consumption of wood amounts to one cubic metre of roundwood equivalents per annum and head of the population. (WK)

1072 Bethel, J.S. and Schreuder, G., 1983. The product mix and flow of wood materials in international trade. In: Bethel, J.S., ed., World trade in forest products, pp. 287-315.

1073 Bethel, J.S., editor, 1983. World trade in forest products. Seattle, University of Washington Press. 551 pp.
This publication includes most of the papers presented to the International Symposium on World Trade in Forest Products, held at the University of Washington, March 22-25, 1983.

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1075 BIS Marketing Research Ltd., 1983. UK hardwood markets 1982-1990. London. 196 pp.
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1076 Bonker, D., 1984. Wood products trade: Risks and opportunities. In: Dickerhoof, H.E., ed., International Forest Products Trade; Resources and Market Opportunities, pp. 37-42.

1077 Boyle, B.J., 1983. A market for Washington wood: The challenge of the 1980s. In: Bethel, J.S., ed., World trade in forest products, pp. 269-275.

1078 Brannlund, R., Lundberg, L., and Wiberg, A., 1982. Determinants of Swedish market shares for pulp and paper and sawn-wood in Europe. Sveriges Lantbruksuniversitet, Inst. for Skogsekonomi, Rapport 36. 28pp.
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1079 Brannlund, R., 1984. Disequilibrium in the Swedish wood market--an econometric analysis. Sveriges Lantbruksuniversitet, Inst. for Skogsekonomi, Arbetsrapport 30. 23pp.
"The analysis is based on the assumption that the market price adjusts sluggishly which means that the market--from time to time--is in a state of disequilibrium." (p.1)

1080 Brannlund, R., 1985. Equilibrium versus disequilibrium; an econometric analysis of the Swedish sawtimber market. Sveriges Lantbruksuniversitet, Inst. for Skogsekonomi, Rapport 57. 24pp.

1081 Brooks, D.J., 1983. The U.S. regional component of the IIASA Global Trade Model. In: Haynes, R. et al., Papers from the second North American IIASA Regional Meeting, 1983, pp. 74-83.

1082 Buongiorno, J. and Gilless, J.K., 1983. Modeling the North American paper industry, with an extension to international trade. In: Haynes, R. et al., Papers from the second North American IIASA Regional Meeting, 1983, pp. 117-133.
The authors conclude that "the methodology used to model the pulp and paper industry of North America can be applied readily to model the international trade of forest products." (p.121).

1083 Carlen, O., Lundberg, L., and Wiberg, A., 1984. Determinants of Swedish market shares of pulp and paper in the Common Market. In: Tervo, M. and J.A. Selby, eds., Symposium on Forest Products and Roundwood Markets, Hanasaari, 1983. Metsantutkimulaitoksen Tiedonatoja no. 141; Scandinavian Forest Economics no. 27. pp. 69-79.

1084 Carlen, O., 1984. En modell for forklaring av varldshandeln med skogsprodukter. Sveriges Lantbruksuniversitet, Inst. for Skogsekonomi, Arbetsrapport no. 39. 24 pp. (in Swedish).

1085 Castillo, M.,S. and Laarmann, J.G., 1984. A market-share model to assess price competitiveness of softwood lumber exports to Caribbean markets. Forest Science 30:928-932.

1086 Cohan, D., 1983. The GEMS approach: Modeling forest products markets using the Generalized Equilibrium Modeling System. In: Haynes, R. et al., Papers from the second North American IIASA Regional Meeting, 1983, pp. 84-116.

1087 Cooper, R.J., 1982. Developments and opportunities in the British tropical timber market. In: Oldeman, R.A.A., ed. Tropical hardwood utilization. pp.341-350.

1088 Crawford, D.B., 1982. British roundwood supplies and their harvesting and marketing. In: Malcolm, D.C., ed. Wood-using industries. Edinburgh, Institute of Foresters. pp.13-24.

1089 Crowell, J.B., 1983. A market for U.S. wood. In: Bethel,J.S., ed. World trade in forest products. pp.231-239.
"Opportunities for increasing U.S. exports to the world markets are great, but government and industry must work together as partners, rather than as adversaries, to overcome some very major barriers." (p.239)

1090 Crowell, J.B., Jr., 1984. How the United States views timber trade prospects. In: Dickerhoof, H.E., ed. International Forest Products Trade: Resources and Market Opportunities. pp.159-162.

1091 Curlin, J. W., 1984. Technology: The key to international wood trade. In: Dickerhoof, H.E., ed. International Forest Products Trade: Resources and Market Opportunities. pp.14-18.

1092 Darr, D.R., 1983. Methods of analysis of bilateral and multilateral

trade among major forest product trading partners. In: Seppala, R., Row,C., and Morgan, A., eds. Forest sector models. pp287-299.

"This paper provides a review of literature of methods of analysis of trade patterns. The needs of the U.S. Forest Service for analysis of trade in timber products are described. Current research of the U.S. Forest Service to model trade in timber products is reviewed." (p.287)

1093 Darr, D.R., 1984. United States trade in timber products within the context of policy and law. In: Lortie, M., ed., Forest resources management - the influence of policy and law, pp. 76-81.

"Present U.S. trade patterns have evolved over time and reflect the interactions of policies, laws, and the relative comparative advantages of producers and consummers around the world." The author speculates "about the direction of the influences of various policies and laws on U.S. trade in timber products." (p.76).

1094 Dickerhoof, H.E., ed., 1984. International forest products trade: Resources and market opportunities. Proceedings of a Conference, Arlington, VA, 1983. Madison, Forest Products Research Society. 176 pp.

1095 Drake, P., 1984. Prospects and problems for North American exports to Pacific Rim countries. In: Dickerhoof, H.E., ed. International Forest Products Trade: Resources and Market Opportunities, pp. 135-139.

1096 Dykstra, D., 1983. Data requirements for the IIASA Global Trade Model in forest products. Laxenburg, Austria, International Institute for Applied Systems Analysis, Forest Sector Project. Mimeo. 41pp.

1097 Dykstra, D., 1983. Data requirements for the IIASA Global Trade Model in forest products. In: Haynes, R. et al., Papers from the second North American IIASA Regional Meeting, 1983. pp.34-73.

1098 Economic Commission for Europe and FAO, 1982. Study of the trade and utilization of tropical hardwoods. In: Oldeman, R.A.A., ed. Tropical hardwood utilization. pp.151-247.

1099 ElSerafy, S., 1983. Protection and the pulp and paper industry. In: FAO. Establishing pulp and paper mills: A guide for developing countries. FAO Forestry Paper 45:62-66.

"Developing countries...tend to give protection to their newly established industries in the belief that these industries, though initially unable to compete with the more established foreign industries, will one day be able to do so. This paper argues against protection generally." (p.62)

1100 Ethington, R.L., 1983. Grades and specifications in world trade of wood products. In: Bethel, J.S., ed., World trade in forest products, pp. 494-501.

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1101 Eza, D.A., McMinn, J.W. and Dress, P.E., 1984. Wood residue distribution simulator (WORDS). U.S. For. Serv., Gen. Tech. Rep.

SE-28. 6 pp.
"The Wood Residue Distribution Simulator (WORDS) attempts to find a least-cost allocation of residues from local sources of supply to local sources of demand, given the cost of the materials, their distribution, and the distribution of demand." (p.1).

1102 FAO, 1984. Monthly bulletin: Tropical forest products in world timber trade. Oct.-Nov., 1984. FAO, FO:Misc/85/6. 56 pp.
Includes tables on flow of tropical log trade, sawnwood trade, veneer and plywood trade, and imports and exports of wood and wood products.

1103 Fast, M.T., 1983. U.S. opportunities in world trade in panel products. In: Bethel, J.S., ed., World trade in forest products, pp. 101-110.

1104 Fast, M.T., 1984. Market opportunities for performance - rated panels. In: Dickerhoof, H.E., ed., International Forest Products Trade: Resources and Market Opportunities, pp. 118-123.

1105 Fitzpatrick, D.G., 1984. Trade outlook for hardwood products. In: Dickerhoof, H.E., ed. International Forest Products Trade: Resources and Market Opportunites. pp.21-23.

1106 Fukuoka, K., 1984. Multiplicative estimation of forest and economic equilibrium. In: Japanese Forest Economic Society. The current state of Japanese forestry (III), pp. 109-125.

1107 Gallagher, P. and Mehrkens, J., 1984. The effects of Pacific Rim housing markets and log supply competition on Alaska's cant and waney trade. Minnesota Agr. Exp. Sta., Tech. Bull. AD-TB-2295. 24pp.
"This study emphasizes the dual markets for Alaskan semiprocessed lumber (cants and waneys) in Japan." (p.1)

1108 Gallagher, P., 1983. International price transmission in the U.S. - Japan softwood trade. Western Journal of Agricultural Economics 8:197-208.

1109 Gallagher, P., 1983. A review of economic frameworks for forestry trade analyses. In: Haynes, R. et al. Papers from the second North American IIASA Regional Meeting, 1983. pp.134-181.
"This paper is organized by general problem areas: Application of the standard market trade model to U.S. forest products, measurement of competition among closely related forest products, and analysis of vertical market relationhips." (p.134).

1110 Gruenfeld, J., 1984. Impact of Alaskan log exports on Pacific Rim markets. In: Dickerhoof, H.E., ed. International Forest Products Trade: Resouces and Market Opportunities, pp. 145-147.

1111 Guillard, J., 1982. Introduction to tropical hardwood markets. In: Oldeman, R.A.A., ed. Tropical hardwood utilization, pp. 145-149.

1112 Gundersen, G.A., 1984. Market for timber and forest products in Norway. In: Tervo, M. and J.A. Selby, eds. Symposium on Forest Products and Roundwood Markets, Hanasaari, 1983. Metsantutkimuslaitoksen

Tiedonantoja no, 141; Scandinavian Forest Economics no. 27. pp. 88-97.

1113 Haley, D., 1983. Government as a wood producer - its interest in world trade: British Columbia. In: Bethel, J.S., ed., World trade in forest products, pp. 240-255.
77% of Canada's forest land is owned by the provinces which "have a vital interest in forest products markets and marketing and... are in a position to exert a significant influence over the nature and development of these markets." (p.241).

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1181 Stephens, G.R., 1984. Timber trends in southern New England: A status report. In: Irland, L.C., ed. Timber supply in the Northeast. Univ. of Maine, College of For. Res., Tech. Note no. 93, pp. 18-25.
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1183 Tedder, P.L., 1983. The timber resource inventory model's (TRIM) integration with the Timber Assessment Market Model. In: Seppala, R., C. Row, and A. Morgan, eds., Forest sector models, pp. 189-198.

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1186 Ticknor, W.D., 1984. How a major forest industry corporation views

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1187 Truitt, J.F., 1983. International joint ventures and the Pacific Rim wood industry. In: Bethel, J.S., ed. World trade in forest products. pp.451-482.
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1188 U.S. International Trade Administration, 1985. Developing competitive markets in forest products: Brazil. Washington, D.C., Dept. of Commerce. 45pp.

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1193 Valtonen, K., 1984. End-use of wood products in construction. In: Tervo, M. and Selby, J.A., eds. Symposium on Forest Products and Roundwood Markets, Hanasaari, 1983. Metsantutkimuslaitoksen Tiedonantoja no. 141; Scandinavian Forest Economics no. 27. pp.30-47.

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"End-use demand (or consumption) is discussed....Trade sector methodology is also discussed using the International Market Pulp Model as an example. " (p.245)

1195 Wadsworth, J., 1983. International wood markets: A European view. In: Bethel, J.S., ed. World trade in forest products, pp.402-415.
"Those forest product companies with the desire to organize and orient themselves to international trade are more likely to be the commercially successful ones." (p.415)

1196 Wadsworth, J., 1984. General economic and timber market trends in Europe. In: Dickerhoof, H.E., ed. International Forest Products Trade: Resources and Market Opportunities. pp.71-76.

1197 Ward, J., 1983. The case for eliminating Japanese duties on wood products. In: Bethel, J.S., ed. World trade in forest products, pp.175-182.

1198 Ward, J.V., 1984. Strengthening the U.S./Canadian partnership in world wood markets. In: Lortie, M., ed., Forest resources management - the influence of policy and law, pp. 25-28.
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1199 Ward, J.V., 1984. United States industry exports to stimulate and promote exports. In: Dickerhoof, H.E., ed. International Forest Products Trade: Resources and Market Opportunities, pp. 34-36.

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1202 Wisdom, H.W., Granskog, J.E., and Peeler, R.J., III, 1983. Southern exports of wood products 1967-80. U.S. For. Serv., Research Paper SO-193. 20pp.

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1208 Yoho, J.G., 1983. Wood in the world economy. In: McCarthy, J.A., ed., Forest land investment, pp. 9-18.
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1211 Eza, D.A., McMinn, J.W. and Dress, P.E., 1984. Cost-effective trucking distances for woody biomass fuels. U.S. For. Serv., Research Note SE-326. 3 pp.

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1212 Mann, J.W., 1984. Transporting wood by barge in the southern United States. Jackson, Miss., American Pulpwood Assoc., 84-A-8. 8pp.

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